The Journal of the American Medical Association

Published under the Auspices of the Board of Trustees

VOL. XLII. CHICAGO, ILLINOIS, APRIL 30, 1904. No. 18.

Original Articles.

CESAREAN SECTION FOR PLACENTA PREVIA.

JOHN B. DEAVER, M.D.

Surgeon-in-Chief, German Hospital.

PHILADELPHIA.

Resort to cesarean section as a means of delivery for a patient with placenta previa is still a sufficiently rare procedure to make the history and result of every case a matter of general interest.

For conservative cesarean section for other conditions the mortality for the mother is about 10 per cent., and that for the fetus from 5 to 10 per cent. The mortality for the mother with placenta previa, treated by means other than cesarean section, is about 11 per cent., while the fetal mortality is from 45 to 50 per cent. Gillette[1] collected 216 cases of placenta previa, of which 34 mothers and 96 fetuses died, being 15.3 per cent. and 44.3 per cent., respectively. Schauta[2] reported from his clinic 234 cases, 16 mothers (6.8 per cent.) and 127 fetuses (54.3 per cent.) perishing.

The conservative methods of packing the vagina with gauze or with the dying infant's body, have been fairly successful in averting death from the mother, by compressing the bleeding placental site. The method of rapid extraction after forcible dilatation of the os, where this is required, places the mother in greater jeopardy, but increases the chances of delivering a living child. It is, therefore, on simply *a priori* grounds, to be assumed that a resort to cesarean section would greatly lessen the mortality of the fetus, while not materially increasing the danger of the mother.

Against this reasoning is argued, first, that the mother's life is of much more consequence than is that of the unborn infant. A weighty objection to this is the fact that neither the surgeon nor the accoucheur is a legal executioner, even were he competent to judge between the intrinsic value of the two lives, each of which is equally under his care. Secondly, it is said that the infant whose placenta is previa, is almost of necessity premature at the time of delivery, and is, therefore, very apt indeed to die in a very short time. Again, it may be rejoined that it is neither ethical nor safe for the attendant to act on the principle that his patient will die soon under any form of treatment, and that, therefore, it is little matter what that treatment may be, for it is the bounden duty of every physician to do what he thinks is for his patients' best interests, irrespective of other considerations. Moreover, while the mortality of premature infants in general is about 22 per cent., as calculated by Ford,[3] that of infants in cases of placenta previa treated by rapid extraction is about 55 per cent., and with slow extraction (practically allowing the fetus to die during delivery) this figure rises to 67 or even 83 per cent. "The methods of treatment in placenta previa, therefore," adds Dr. Ford, "are clearly responsible for the loss of 45 per cent. to 61.4 per cent. of the children," and although the prospects from conservative delivery may have brightened somewhat within the past decade, yet it still seems probable that the fetal mortality is in this affection disproportionately high.[4]

The danger to the mother in placenta previa is chiefly from hemorrhage, and this hemorrhage, it is to be recollected, is due to premature detachment of the placenta from the lower uterine segment, opening up the uterine sinuses, so that the blood which should pass into the placenta, and so on to the fetus, rushes forth through the dilating os. The fetus meanwhile is becoming asphyxiated. A remedy for the former condition can not be found until the uterus is allowed to contract, and this can not take place until the child is removed, and only by the removal of the child can its asphyxiation be prevented; hence, removal of the child is the first indication. To secure this *per vias naturales* it is necessary, first, to increase the bleeding by separating the placenta sufficiently to allow the introduction of the obstetrician's hand for the performance of version; and while these manipulations are taking place, and the mother is bleeding more profusely than ever, the child is smothering within the womb.

It becomes, therefore, a question demanding the highest judgment to determine whether the mother will endure the added hemorrhage, and whether the fetus will survive the period of asphyxiation, momentary though it be.

In primipara, and in multipara whose os is rigid and undilated (a condition not so rare in placenta previa as has been supposed by some authors), rapid obstetric delivery is no easy task, and the lacerations of the maternal soft parts and the shock to both mother and child may be considerably more than would be entailed in a cesarean section. In other cases, where the os was already dilated, or was soft and easily dilatable, and where the parturient canal was roomy, version and rapid extraction would no doubt offer equally good chances of success.

If labor had already lasted some time, and there was probability of uterine infection, I am not sure whether a Porro-cesarean section might not give the best ulti-

1. THE JOURNAL A. M. A., Aug. 24, 1901.
2. Interstate Med. Jour., St. Louis, April 1, 1902.
3. Amer. Gyn. Jour., 1892, II, 525.
4. Higgins, in the Boston Med. and Surg. Jour., 1902, I, 6, states that at the Paris Maternity the mortality for premature infants is over 70 per cent., and that at the New York Nursery and Child's Hospital it is 60 per cent. These figures seem scarcely compatible with his other statements to the effect that the fetal mortality in placenta previa is from 50 to 60 per cent. only, while at the same time 62 per cent. of such infants are premature.

mate results; but the general opinion of the profession appears to be that in infected cases cesarean section is to be avoided.

If no evidences of fetal life exist, it would, of course, be mere folly to perform cesarean section, since craniotomy or embryotomy would offer a perfectly satisfactory solution of the difficulty in cases where normal delivery proved impossible. On the other hand, if the mother were evidently moribund, a rapid cesarean section should by all means be preferred, if the fetus was still living and viable.

In a private house, where, in case of emergency, the attendant has no skilled assistance, and is unable to have his patient immediately removed to a hospital, it is my opinion that version and extraction would be the better treatment. If the case were not urgent, an efficient vaginal tamponade should secure time enough for preparation for cesarean section; but it is a rule that may well be called golden for the surgeon not to leave his patient's side, once labor has commenced, until she has been delivered. At any moment a torrential hemorrhage may occur, and the mother die like a flash.

In the recent literature a great number of articles may be found,[5] whose writers support one or the other side of this question, and which the reader who desires a fuller exposition of the subject will do well to consult.

The case which I report was referred to me by my friend, Dr. Charles E. Bricker, after consultation with whom I selected cesarean section as the lesser of the two evils, and as an operation with whose technic I was more familiar, and, therefore, one with which I was more likely to have success than with podalic version under such unfavorable circumstances.

History.—Mrs. W., aged 41. Family history negative. Always enjoyed good health. Digestion good, bowels constipated. Married 21 years, four children living and well, one miscarriage five years ago. Patient has always had difficult forceps labors.

Last menstrual flow May 29, 1903. Dec. 20, 1903, she had a severe hemorrhage and was obliged to go to bed, since which time she had felt weak and would become very tired on slight exertion.

Thirty-six hours before admission, morning of Feb. 6, 1904, to a private room at the German Hospital, the patient had a very severe hemorrhage and the vagina was packed with cotton by Dr. Bricker.

Examination.—On admission patient is very well nourished, heavy, fatty abdominal walls, abdomen very large, patient is restless, pulse rapid and thready, mucous membranes pale. Fetal heart sound can be heard on the right side near the umbilicus. Vaginal examination shows the os to be dilated to the size of a silver half dollar and filled by a soft mass. Diagnosis: Placenta previa centralis.

Operation.—Feb. 6, 1904. Incision through the right rectus muscle, peritoneum opened, enlarged uterus was delivered through the incision and intestines protected with gauze pads.

A longitudinal incision was made into the uterus, the bag of waters protruded and was ruptured, child delivered carefully, laid on right side, cord ligated. The placenta, which was attached directly over and around the internal os, was carefully separated and the uterus contracted satisfactorily. The uterus was sutured with two rows of silk. Abdominal wound closed by tier suture. The wound healed by first intention and the patient was discharged entirely well, Feb. 21, 1904. The baby is well and healthy.

What determined Dr. Bricker and myself to do cesarean section in preference to delivery by the natural way was: Previous deliveries by forceps, all of which were difficult, in addition to forced dilatation, version and perhaps forceps again; the risk to the child's life; danger to the mother, both from hemorrhage and injury to maternal parts; and in favor of delivery by abdominal section, the much less risk to the mother and being practically certain of saving the child, labor being but a few days of full term.

The results of cesarean section for placenta previa, so far as hitherto reported, are not very encouraging. They show a considerably increased mortality for the mother, and a not materially decreased death-rate for the fetus, as compared with those of the older methods. It has been possible to collect in all 25 cases where this method of treatment has been employed, in one of which, however, the results have not been determined (Storer's case, No. 22). Of the remaining 24 cases, 19 mothers and 8 children recovered, a mortality, respectively, of 20.8 and 66.6 per cent., including as a recovery the child in Tait's case, it having lived for one month and dying then from bronchitis. If we exclude the cases (Nos. 2, 14, 17, 19, 20, 21, 25) where the operation was undertaken before the fetus was viable, and those where it is known to have been dead before operation was commenced, the fetal mortality falls to 50 per cent., showing that in reality cesarean section will save more viable fetuses than can be saved by delivery *per vias naturales;* whereas, for the mother, the mortality in these cases is only 18.75 per cent., as against 20.8 per cent. in the whole series, and 28.5 per cent. where the operation was done before the fetus was viable or when it was already dead, showing that the earlier stage of pregnancy is more unfavorable for the mother.

If we now consider only those cases (Nos. 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 16, 18, 23, 24), sixteen in number, where delivery by cesarean section was a method of choice, not of necessity, as in the remaining cases (Nos. 2, 12, 15, 17, 19, 20, 21, 25), the fetal mortality is 56.2 per cent., and that for the mother 18.75 per cent., as against 87.5 per cent., fetal, and 25 per cent. maternal, where delivery by natural method was impossible. But in this last series—where cesarean section was imperative—of seven fetuses so delivered, no less than six were already dead or not viable, only one in the series recovering, thus making the improved fetal mortality 50 per cent.

In view, therefore, of these figures, it is evident that cesarean section is not a method to be unreservedly recommended in placenta previa, but that it should be confined, where a choice between it and obstetric delivery is possible, to those patients whose cervix is with difficulty dilatable, whose birth canal is rather contracted, where immediate extraction of the fetus is necessary, and where further hemorrhage would almost certainly kill either mother or child, or both.

CASES OF CESAREAN SECTION FOR PLACENTA PREVIA.

1. Bernays: THE JOURNAL A. M. A., May 12, 1894. For placenta previa. Mother recovered. Child died in ten hours.
2. Bossi: See De Paoli: La Rassegna d'Ostetricia e Ginecologia, 1899, viii, No. 3, p. 155; quoted by Mattoli: Archivio italiano de Ginecologia, 1899, ii, 309. For rupture of uterus with placenta previa. Mother died in twelve hours. Fetus dead when extracted.
3. Braun-Fernwald: Archiv. f. Gyn., 1899, lix, No. 2, p. 320. Porro, for placenta previa with uterine myomata. Mother recovered. Child died in three days.
4. Braun-Fernwald: Ibid. Porro, for sepsis with placenta previa. Mother recovered. Child died of atelectasis pulmonum.
5. Conroy: Bost. Med. and Surg. Jour., 1902, cxlvi, 634. For placenta previa. Mother recovered. Child dead when extracted.

5. Among those who favor cesarean section in these cases are the following: Ford (Amer. Gynecol. Jour., 1892, ii, 525), Dudley (N. Y. Med. Jour., 1900, ii, 754), Boyd (Proc. Phila. Co. Med. Soc., 1901, iii, 117), and Donoghue (THE JOURNAL A. M. A., 1902, ii, 620); while articles opposing this method have been written by Ehrenfest (Amer. Med., 1902, i, 64), Schauta (Interstate Med. Jour., St. Louis, 1902, ix, 177), Murray (Amer. Med., 1902, i, 945), De Paoli (Archiv f. Gyn., 1903, lx, 15), and Higgins (Boston Med. and Surg. Jour., 1902, i, 6).

6. Covington: Cincinnati Lancet-Clinic, 1901, i, 558. For placenta previa. Mother recovered. Child recovered.
7. Deaver: (Case here reported.) For placenta previa. Mother recovered. Child recovered.
8. Donoghue: Bost. Med. and Surg. Jour., 1900, ii, 571. For placenta previa. Mother recovered. Child recovered.
9. Donoghue: Ibid., 1902, i, 18. For placenta previa. Mother died after an operation for intestinal obstruction on fourth day after the cesarean section. Child recovered.
10. Gillette: Ibid., 1901, ii, 9. Porro, for placenta previa. Mother recovered. Child recovered.
11. Hare: Ibid., 1901, i, 151. For placenta previa. Mother died in eleven hours. Child died in thirteen days of inanition.
12. Hopkinson: Amer. Med., 1902, i, 140. For contracted pelvis, with lateral placenta previa. Mother recovered. Child recovered.
13. Hypes and Hulbert: See Bernays, loc. cit. For placenta previa. Mother died. Child died.
14. Lanphear: Amer. Jour. of Surg. and Gyn., 1901, xiv, 132. Porro, at end of fourth month for infected placenta previa. Mother recovered. Fetus not viable.
15. Lodemann: Centralbl. f. Gyn., 1893, xvii, 564. For placenta previa with osteomalacic pelvis. Mother recovered. Child died.
16. MacCalla: Medical Sentinel, 1900, viii, 55. Porro, for placenta previa. Mother recovered. Child lived one week.
17. Mattoli: Archivio Italiano di Ostet. e Gin., 1899, No. 4, p. 305. For placenta previa, with undilatable cervix. Mother recovered. Child dead before extraction.
18. Omboni: See Strodtmann: L'Arte Ostetrica, 1902, xvi, 258. For placenta previa. Mother recovered. Child living when extracted; no subsequent history.
19. Pasquali: Atti della Soc. Italian. d'Ostet. e Gin., 1895, ii, 209. For contracted pelvis with placenta previa. Mother recovered. Child not viable.
20. Pasquali: Ibid., loc cit. For contracted pelvis with placenta previa. Mother recovered. Child not viable.
21. Sligh: Amer. Jour. of Obstetrics, February, 1892. For carcinoma of cervix with placenta previa. Mother died day of operation. Child dead when extracted.
22. Storer: Quoted by Mattoli, loc. cit. Porro, for "grave hemorrhage in pregnancy." Stump of uterus treated extraperitoneally, according to the original procedure of Porro. No history of mother and child given.
23. Tait: Lancet, 1899, i, 364. Porro, for placenta previa. Mother recovered. Child died in one month of bronchitis.
24. Truesdale: Boston Med. and Surg. Jour., April, 1903. For placenta previa. Mother recovered. Child died.
25. Webster: Amer. Jour. of Obst., 1901, xliii, 158. For placenta previa, in a mother of 13 years of age. Mother recovered. Child dead (?) when extracted.

SURGICAL OBSERVATIONS IN THE PHILIPPINES.*

J. M. BANISTER, A.B., M.D.

Major and Surgeon, U. S. Army; Commanding Officer, First Reserve Hospital.

MANILA, P. I.

Having for the past twelve months been closely associated with the surgical work at the First Reserve Hospital in the City of Manila, it has occurred to me that it might be of interest to the members of the Manila Medical Society should the results of this year's experience in surgery be presented to them, covering, as it does, a wide range of surgical conditions. Moreover, I am induced to select the above as the title of my paper by reason of the erroneous views prevailing in certain quarters, both in this archipelago and in the United States, as to the results of surgical work in the Philippine Islands. I shall first give a tabulated list of the various operations performed by the surgeons on duty at the First Reserve Hospital since Jan. 1, 1903, and then adduce certain conclusions, which would seem justified by the results. The operations enumerated below were performed by First Lieutenants W. L. Keller, assistant surgeon, U. S. A., E. L. Ruffner, assistant surgeon, U. S. A., Capt. H. R. Stiles, assistant surgeon, U. S. A., and myself. In the general list of operations the names of the responsible operators are given:

Operations.	Cases.	Operators.	Died.
Bassini operation for the radical cure of inguinal hernia.	59	Keller 22, Ruffner 4, Banister 33.	0
Radical cure for ventral hernia..	3	Banister	1
Operation for appendicitis.....	30	Keller 12, Ruffner 1, Banister 17.	1
Laparotomy for perforating gunshot wounds of the abdomen.	3	Banister	2
Laparotomy for sarcoma of small intestine—extensive.	1	Keller	1
Laparotomy for rupture of intestine from blow on abdomen.	1	Keller	1

* Read before the Manila Medical Society, Manila, P. I., Feb. 1, 1904.

Operations.	Cases.	Operators.	Died.
Laparotomy for acute intestinal obstruction	1	Keller	1
Laparotomy-exploratory	3	Banister	0
Radical operation for varicocele suprapubic incision.	49	Keller 31, Ruffner 10, Banister 8.	0
Large abscess, mammary region—incision and drainage.	1	Keller	0
Large lumbar abscess—incision and drainage.	1	Keller	0
Large abscess abdominal wall—deep incision and drainage.	3	Ruffner 2, Banister 1.	0
Abscess of liver. Operation for..	7	Keller 4, Banister 3.	2
Abscess—ischiorectal	1	Ruffner	0
Sebaceous cyst of back—large excision.	1	Keller	0
Sebaceous cyst of arm—large, extending beneath biceps muscle, excision.	1	Ruffner	0
Lipoma of forearm. Excision...	1	Ruffner	0
Large cyst of neck, deep. Excision.	1	Keller	0
Sarcoma of neck, deep. Excision.	1	Keller	0
Bunions, radical operation; resection of joints involved.	10	Keller 8, Ruffner 2, Banister 2	0
Amputation of fingers and toes...	8	Keller 2, Ruffner 6.	0
Circumcision	5	Keller 2, Ruffner 3.	0
Removal of lupus of face and nose—extensive.	1	Keller	0
Resection of rib for empyema....	3	Keller 2, Banister 1.	0
Resection of rib for necrosis....	1	Keller	0
Resection of sixth costal cartilage for post-typhoidal necrosis.	1	Banister	0
Extensive and deep streptococcic infection of lip and face—cautery.	1	Keller	1
Cellulitis—multiple incision.....	1	Keller	0
Adenitis, inguinal—excision and curetting.	4	Keller 2, Ruffner 2.	0
Amputation of penis and scrotum, with castration, for epithelioma.	1	Keller	0
Epithelioma of cheek with induration of glands of neck—excision of tumor and glands.	1	Banister	0
Epithelioma of tip of tongue—excision of anterior half of tongue.	1	Banister	0
Excision of tumor of neck.....	1	Keller	0
Varicosed veins of leg—ligation and excision.	5	Keller 3, Banister 2.	0
Gunshot wound of femur—old, with necrosis of both condyles. Bullet removed from external condyle. Necrosed bone removed.	1	Keller	0
Gunshot wound of femur—old. Bone perforated by bullet just below trochanter major. Necrosis with prolonged suppuration.	1	Ruffner	0
Gunshot wound of forearm. Bullet located by *x* ray and removed.	1	Keller	0
Plastic operation for extensive laceration of penis and scrotum.	1	Keller	0
Acute suppurative arthritis—knee. Multiple incision and drainage.	2	Keller 1, Banister 1.	0
Tendo-plastic operation for contracted tendo-Achillis. Tendon lengthened 3 inches with recovery of function.	1	Banister	0
Suppuration of knee joint from the presence of necrotic bone fragments resulting from extensive comminution of the patella.	1	Banister	0
Traumatic arteriovenous aneurism of external carotid artery and internal jugular vein. Ligation.	1	Banister	1
External perineal urethrotomy with a guide.	1	Banister	0
External perineal urethrotomy without a guide.	2	Banister	0
Laminectomy for fracture of spine with paraplegia.	1	Banister	0
Severe gunshot fracture of femur and humerus—patient moribund	1	Banister	1
Extensive necrosis of femur from contusion. Necrosed bone removed.	1	Banister	0
Resection of first metacarpophalangeal joint for old dislocation of thumb with anchylosis.	1	Banister	0
Necrosis of os calcis—removal of diseased bone.	1	Ruffner	0
Hernia of adductor longus muscle of thigh from rupture of fascia lata. Operation for repair of fascia lata.	1	Banister	0
Carbuncle, large, dorsal region—complete excision.	1	Ruffner	0

Operations.	Cases.	Operators.	Died.
Removal of piece of glass 5x1½ inches from forearm where it had remained for three years.	1	Ruffner	0
Operation on rectum and anus...	57	Keller 38, Ruffner 19.	0
Hydrocele — excision of tunica vaginalis with drainage.	10	Keller 5, Banister 5.	0
Wiring of clavicle for comminuted fracture.	2	Keller 1, Banister 1.	0 0
Wiring of fractured patella.....	2	Banister	0
Wiring of tibia for compound fracture.	2	Keller (one of these operations was performed outside of First Reserve Hospital.)	0
Trephining for cranial injuries...	4	Keller 2, Banister 2.	1
Enucleation of eyeball.....	4	Stiles 1, Banister 3.	0
Strabismus operations.....	7	Stiles 1, Banister 6.	0
Extraction of senile cataract....	2	Stiles 1, Banister 1.	0
Removal of pterygium by excision.	30	Stiles 25, Ruffner 2, Banister 3.	0
Suppurative mastoiditis. Radical operation.	2	Banister	0
Ectropion—operation for by Adams's method.	1	Banister	0
Operations on corneal ulcer by actual cautery and curetting.	23	Stiles	0
Excision of cyst of eye lid.....	1	Stiles	0
Paracentesis of membrana tympani.	9	Stiles 8, Banister 1.	1
Removal of aural polypi.....	10	Stiles	0
Removal of exostosis of external meatus.	2	Stiles	0
Actual cautery for turbinate hypertrophy.	16	Stiles	0
Incision of abscess of epiglottis..	1	Stiles	0
Removal of foreign body from laryax.	1	Stiles	0
Removal of papilloma from laryax.	1	Stiles	0
Removal of adenoids.....	5	Stiles	0
Removal of nasal polypi.....	4	Stiles	0
Total	428		13

GENERAL ANALYSIS.

In this list of 428 operations, such so-called operations as the opening of small abscesses, the removal of ingrowing toe nails and other surgical measures of similar slight importance have been carefully eliminated, although frequently included in the statistical tables of many hospitals. In scanning the list it can readily be seen that, of the 428 operations recorded, 145 may justly be ranked as capital. In this list may be noted 59 operations for the radical cure of inguinal hernia; 3 for ventral hernia; 30 for appendicitis; 9 other laparotomies, 3 being for perforating gunshot wounds of the abdomen; 7 operations for abscess of the liver, 5 being by the abdominal route; 3 external perineal urethrotomies, 1 with and 2 without a guide; 4 trephine operations for cranial injuries or their effects; 2 radical operations for suppurative mastoiditis; 1 excision of the anterior half of the tongue for malignant disease, and many other important operations. Of these operations 106 involved invasion of the peritoneal cavity.

In this list of capital operations there was a mortality of 12. One other patient in the general list died from septicemia, due to serious streptococcic infection of the deep tissues of the lip and face. The operation in this case was the use of the thermo-cautery, which can not be considered a capital operation, and hence has not been placed in such list. Of these 145 capital operations, 87 were performed by the writer, with a mortality of 6. Of the 6 fatal cases, four patients were moribund when placed on the operating table just after reaching the hospital, and a fifth, a patient suffering from a traumatic arteriovenous aneurism of the external carotid artery and internal jugular vein, which had become diffuse, was in momentary danger of death from hemorrhage, and the operation of ligation was attempted as affording a forlorn hope of saving life. In this connection, I shall state that since I have been connected with the First Reserve Hospital it has been the rule to operate on desperate cases, as soon as brought to the hospital, in order that such patients might be given their one chance of life. By following this rule I was able to save the life of one out of three patients brought to the hospital during the year suffering with perforating gunshot wounds of the abdomen. In this case the descending colon was wounded, and if the expectant plan had been followed this patient would, in my opinion, have died.

This man was brought before this society a few months ago, when a brief outline of his case was given. The sixth case of mortality, in my personal capital operations, resulted from acute tetanus, following what I considered, in every way, a most satisfactory operation for ventral hernia. A complete and exhaustive bacteriologic investigation as to the source of the infection in this case was immediately instituted by my order, the laboratory work being performed by Assistant Surgeon H. M. Smith, the bacteriologist and pathologist of the hospital. Everything connected with our technic was discovered to be blameless. True cultures of tetanus bacilli were, however, obtained from the scrapings of the floor of the operating room, the tetanus spores having presumably gained access to the wound by means of dust blown in from the street about forty yards in front of the hospital. It must be understood that the tiled floor of the operating room had been habitually subjected to scrubbing with a strong solution of carbolic acid.

Anaërobic cultures obtained from the floor of the operating room, as mentioned, produced tetanus when injected into rats. Since the occurrence of this lamentable accident the windows of the operating room on the side facing the street have been kept closed, or covered with wet sheets, during operations. Furthermore, as additional precautions against the possibility of harboring or of introducing tetanus spores by means of dust the operating room is scrubbed out with strong solution of carbolic acid just before each operation, clean sheets are spread around the operating table, and no one is permitted to enter the operating room in shoes which have been worn outside. Slippers, which have never been used outside of the operating rooms, are kept in the surgeon's dressing room for the use of the surgeon and assistants or others entering the operating room. We have had no other trouble on the score of infection from tetanus.

Thus in the six cases of mortality in my 87 capital operations, five were from their very nature doomed in advance, and were subjected to operation simply as giving the unfortunate patients a last chance. The tetanus case is the only one in which the fatal result can, in any way, be attributed to the operation. The most of the remaining 58 capital operations were performed by First Lieutenant W. L. Keller, assistant surgeon, U. S. Army, and the remainder by his successor, First Lieutenant E. L. Ruffner, assistant surgeon, U. S. Army. In all important operations performed by my assistants, I almost invariably act as first assistant, and hence am perfectly familiar with all surgical results in the hospital. In this series of 58 capital operations performed by my surgical assistants, six deaths resulted, the fatal cases being as follows: (1) One case of malignant appendicitis in an officer, whose family opposed operation until a successful result was impos-

sible in consequence of gangrene of the intestine. This operation was performed by Dr. Keller just prior to my arrival at the First Reserve Hospital. (2) One case of sarcoma of the small intestine so extensive as to preclude any attempt at removal, so that the operation simply amounted to a laparotomy with inspection of the growth. (3) A case of septic peritonitis due to a traumatic rupture of the small intestine, in which a laparotomy was performed in accordance with our established rule. (4) One case of acute intestinal obstruction from bands of adhesions, the intestine being extensively gangrenous and the case hopeless, the operation consisting in a laparotomy with relief of the constriction. (5) Two cases of hepatic abscess with multiple and extensive abscesses throughout the liver.

As can be seen these six cases, as five of my six, were doomed from the first, and were hopeless when subjected to operation in accordance with our rule to let no man die without making an effort to save him. In considering this mortality rate of twelve deaths in 145 capital operations, our percentage would be, considering the results in hopeless cases as being chargeable to the operation, 8.2 per cent. Taking the whole number of operations given in the general list, amounting to 428, the mortality of 13 would give our death rate as 3.03 per cent.

THE POSSIBILITY OF ASEPSIS.

Before coming to the Philippines I had heard a great deal of talk in the United States about the poor surgical results to be expected in these islands owing to climatic conditions, lack of proper sanitation, and many other factors, under whose saturnine influences the various pathogenic bacteria, most to be dreaded in surgery, would flourish and infect, infect and flourish, at their own sweet wills, while the poor surgeon could only stand by helplessly wringing his impotent hands, and bemoaning his fate at being thus compelled to practice his art in such fatal surroundings. In fact, such statements have not solely emanated from the United States, for a good deal of comment of the same tenor has been and is still heard in the Philippines. I feel that, from the number of cases of surgery which I have had an opportunity of observing in these islands, I am to some degree entitled to express an opinion on the subject, and I desire to say, without the slightest reservation, that, with proper aseptic and operative technic, just as good results may be expected to follow operative work here as in any country under the sun. When septic infection occurs in operation wounds in the Philippines, the fault must be looked for in the technic, not in the climate. Aseptic surgery in the Philippines may be expected to have the same results as would follow the same technic in New York, Ohio, Kansas or California. This is absolutely true for pyogenic infection. The great prevalence of tetanus spores in the soil of the Philippines adds a possible element of danger, which would not be encountered in many portions of the United States. As proved by my fatal case of tetanus, spore bearing dust must be guarded against in our operative work in this part of the world.

As a proof of the correctness of the views just expressed, I shall state that at the First Reserve Hospital we have secured an almost continuous series of aseptic results. In our series of 59 hernia operations, during the past twelve months, we discovered only one small superficial stitch abscess, which was not worthy of the name of "abscess," but which was recorded as such, as we perferred to err on the safe side. In every one of our interval operations on account of former appendicitis, or of our appendicectomies performed during the acute stage before infection outside of the appendix had occurred, has first union resulted. The same can be said of all of our other clean cases, with three slight exceptions, and the only instances of pyogenic infection occurring in such cases at this hospital, since I have been connected with it, have been the following: (1) The small stitch abscess which occurred in the subcutaneous tissue in the hernia case, previously referred to. (2) Suppuration ensued in one operation performed on the knee joint on account of a serious injury, which had broken the patella into many fragments. (3) In an operation for the repair of the fascia lata, in the case of hernia of the adductor longus muscle, a slight superficial infection resulted. This was of no importance whatever, and occurred as a result of the slipping of the dressing and a consequent uncovering of the wound, while the patient was in bed soon after the operation. It seems to me that such aseptic results, which have been obtained in an old Spanish hospital building in the much-criticised Philippines, and which are not surpassed, as far as I have been able to learn, in any hospital in more favored climes, should forever set at rest all doubt regarding the proposition, which I have advanced, that clean results may be expected to follow clean methods here as constantly as in other portions of the world. So much for the dangers of septic infection.

RECUPERATION IN THE PHILIPPINES.

As far as recovery after operations is concerned, I desire to advance the broad proposition that surgical cases, subjected to operation, recuperate here in a most satisfactory manner. After serious operations there is here the usual slight aseptic rise of temperature, just as is the case in the United States or Europe, with a speedy fall to the normal. This applies especially to clean cases, but in pus cases, after thorough drainage has been established, we find the patients progressing toward recovery in the same manner that we have been accustomed to see in our best equipped and regulated hospitals at home. After such operations as those for the radical cure of hernia, for appendicitis or surgical measures of similar severity, our soldiers are able to return to their regiments in as reasonable a period of time as I have been accustomed to see in the United States in the same class of cases. As far as the permanency of the cure in such cases is concerned, I desire to state that I have not heard of a single case of relapse in the 59 cases of hernia subjected to operation since I have been connected with this hospital, and I only know of two cases of ventral hernia resulting from all the rest of our abdominal operations performed during the past year and resulting in recovery. These two cases of ventral hernia occurred in patients who had had large appendiceal abscesses, which had required drainage for a considerable time. Thus out of 106 cases, in which the peritoneal cavity has been invaded by the surgeons of the First Reserve Hospital during the past twelve months, only two cases of post-operative ventral hernia have resulted.

RESULTS IN APPENDICITIS.

In a paper entitled "The Modern Radical Operation for the Cure of Non-Strangulated Inguinal Hernia," read before this society some months since, I expressed fully my views on the subject of hernia, and the views then expressed relative to the value of this operation have

simply been strengthened from further experience with it in the tropics.

With reference to appendicitis in the Philippines, a few notes may not be out of place. In the first place, apendicitis here is the same disease, with all its different forms and types and complications, that we have been accustomed to encounter at home, and in my Philippine experience I have not been able to observe any relation whatever between climatic conditions and the special type of the disease present in any case. For a time, after assuming my duties at the First Reserve Hospital, I was of the opinion that this disease was more prevalent here than in the United States, but on further observation, I have changed my views on this point. When it is borne in mind that the hospital mentioned is the large general military hospital for the Philippine archipelago, and that in it are treated almost all of the serious surgical cases that can be transported to this point from the entire military personnel in the islands, including officers, enlisted men, American employes of the various departments of the service, native scouts and native employes of the military establishment, it can well be appreciated that our series of 30 operations for appendicitis in the past twelve months is an infinitesimal ratio. Another point of interest in this connection is this, that all of our appendicitis patients, since I have been at this hospital, have been of the white race, and that no record can be discovered here of any native having been treated for this disease in past years.

In our list of 30 operations for appendicitis in the past twelve months, as before stated, there was one death from a most malignant attack with gangrene of the cecum, operation not having been permitted until too late. This occurred just before my arrival at the hospital, and consequently I did not personally observe the case, but since the patient was under the professional charge of First Lieutenant W. L. Keller, assistant surgeon, U. S. Army, one of the most careful, judicious and accomplished surgeons of my acquaintance, I feel sure that he received every attention, and that he was a doomed man before he was placed on the operating table. The 29 patients remaining recovered, although the great majority of them were in very serious conditions. This year's record for this dangerous disease, which shows that recovery resulted in every case in which operation was permitted when the surgeon had so advised, does not offer a very strong argument in favor of the deadly effects of this climate in serious surgical work. I have no more fears concerning the outcome of an operation for appendicitis here than I would have in a similar case in the United States, neither am I afraid to operate early in an acute attack. There is no more demand for delay in operation here than would be the case in any other country, and I must confess that all of my surgical tendencies are opposed to delay in appendicitis work. I consider appendicitis a strictly surgical condition, and see no logical reason for waiting for the formation of abscess, perforation with probable septic peritonitis, or gangrene of the appendix and cecum, with all that such conditions imply.

If our acute appendicitis cases do not speedily improve when admitted to the First Reserve Hospital as shown by a rapid decline of leucocytosis, and by an amelioration of general and local symptoms, the patient is subjected to operation without delay. This has always been my practice, and that it is not opposed to reason is evidenced by the fact that, in my limited experience as an operator for appendicitis, no case of mortality has resulted. I make this statement in no spirit of egotism, but as a simple declaration of fact.

A few days ago I removed an appendix during the early period of an acute attack of apendicitis, when, from the symptoms, it had become evident that the disease was steadily progressing. This appendix contained a number of fig seed, these little bodies being distributed from the apex along the entire length of the interior of the appendix. This is the first case in my own experience, in which the appendix was found to contain fruit seed of any kind. The advantage of the early operation in such a case can be readily appreciated.

In concluding these desultory remarks on appendicitis in these islands, I shall state that we take no account of the climate in our treatment of such cases at the First Reserve Hospital, but are guided here by the same considerations which would influence us in the United States, and confidently expect the same results that would obtain there.

HEPATIC ABSCESS.

Abscess of the liver is a great bugbear in the tropics, but at the First Reserve Hospital, with a very wide area of territory from which to draw our clinical material, we have only had six patients with this disease during the past twelve months. One patient was operated on twice; once under general anesthesia by aspiration in the attempt to locate the abscess, and the last time by the abdominal route with evacuation of the abscess. In this case aspiration utterly failed to show the presence of pus, although this procedure was most carefully performed through several different punctures. These six patients were subjected to operation: one by the thoracic route, after resection of a rib, and the remaining five by the abdominal route. A previous history of amebic dysentery was the rule in these cases. There were two deaths in these six cases, in both of which the abscesses were multiple and very extensive. In the four patients who recovered, the abscesses were single, though, as a rule, large. From my own observation, and from conversation with other surgeons relative to liver abscess in this climate, I have formed the opinion that with a patient not moribund, and with a single abscess to contend with, a careful operation, either by the thoracic or abdominal route, will afford a very favorable prognosis. In cases of multiple abscesses the prognosis is very gloomy, as patients so affected almost invariably die. Of these six patients suffering from hepatic abscess, two were natives. I am especially interested in the fact that two natives were victims of the disease, as I remember reading a short while since in one of the medical journals, published in the United States, that liver abscess was unknown among the natives of the Philippine Islands.

BONE SURGERY.

Bone surgery in the Philippines has results that can not be excelled in any part of the world, provided, of course, that a thorough aseptic technic is employed. In a case of comminuted fracture of the clavicle of a degree to render proper apposition impossible with the usual methods of treatment, or in a suspected fracture of the cranium with symptoms of cerebral compression, or in necrosis involving the bone in any portion of the body, I would not be induced to delay operation by any fears on the score of the climate. The results in such cases have been eminently satisfactory to the surgeons at the First Reserve Hospital. In cases of comminuted

fracture of the clavicle of such a character as to preclude the possibility of recovery with useful shoulder under other treatment, I would operate at once, thoroughly exposing the fractured bone at the seat of the injury, placing the fragments in correct apposition under the guidance of vision, and holding them in such position by means of proper wiring with silver wire. I would do this in hope of securing a perfect result in spite of the climate, and all its supposed deleterious influences on surgical work. In fact, during the past year we have done this very thing in two serious cases of this type which were brought to the First Reserve Hospital. Dr. Keller was the responsible operator in one case and I in the other. Both patients made perfect recoveries with useful shoulders, my patient performing now his accustomed work as wheelwright in the employ of the quartermaster department in Manila. As a proof of how successful the operation of wiring the patella may be in this climate, I present for examination this evening a patient, on whom I performed this operation a short while since.

As noted in the preceding pages, I was called on to treat at the First Reserve Hospital, during the past year, three cases of perforating gunshot wound of the abdomen. In each of the three I performed a laparotomy after admission to the hospital. One patient, a soldier who had been accidentally shot by a comrade with a Krag rifle, was brought to the hospital moribund in about thirty minutes after the reception of the wound. The common and external and internal iliac veins of the right side were found to have been torn to pieces at their junction, and death occurred on the table as the result of the excessive hemorrhage so caused.

A second laparotomy for gunshot wound of the abdomen was performed in the case of a Filipino scout, who had been shot by ladrones early one morning about 3 o'clock, and who was brought to the hospital after 11 o'clock on the following night. At the operation I discovered that the small intestine had been so severely lacerated at one spot that it would be necessary to resect the bowel, and make an end-to-end anastomosis. This was done, the anastomosis being made with the Murphy button. The patient lived four days, and at the necropsy it was found that the intestine was gangrenous for about a foot on each side of the union. The anastomosis, however, had not yielded. This man might have been saved if he had reached the hospital soon after his injury was received.

The third case was brought to the operating room within two hours after being wounded with a 38-caliber revolver at close range. I opened the abdomen, found the wound in the bowel, which was the descending colon in this case, repaired the wound, cleaned out the peritoneal cavity, closed the abdomen, using a small cigarette drain of gauze covered with rubber tissue, and the patient made a rapid and uneventful recovery. The first two cases I considered to have been necessarily fatal cases, and the fatal issue in no wise attributable to the operation, while the third case, which made such a satisfactory recovery, would certainly have died without operation.

CONCLUSIONS.

It is not necessary to discuss all of the interesting cases or types of cases in the list of operations which I have given. Those cases with results, which I have specially brought forward, when considered in conjunction with the tabulated list, will, I trust, furnish sufficient evidence of the propriety of the views which I have expressed in the preceding pages on the subject of surgery in the Philippine Islands, which views I beg leave to present, in conclusion, in the form of the following propositions:

1. Aseptic results will just as surely follow aseptic methods in the Philippines as in the United States or in Europe.

2. Should septic infection occur in any clean case subjected to operation in the Philippines, blame the technic, not the climate.

3. Successful attainment of the object, for which operation has been undertaken, will follow careful and skillful surgery in the Philippines with the same regularity that we have been accustomed to observe in such work at home.

4. Convalescence after surgical operations in the Philippines is rapid and satisfactory, when such operations have been carefully and skillfully performed.

5. The danger of mortality after a skillfully performed surgical operation, in which all the details of a rigid aseptic technic have been carried out, is not increased by the influences of the climate of the Philippines unless the patient is, at the same time, the victim of some other serious disease.

A CLINICAL STUDY OF THE BACILLUS DYSENTERIÆ IN BOSTON AND VICINITY.*

ROBERT W. HASTINGS, A.M., M.D.
Resident Physician on the Boston Floating Hospital.
BOSTON.

The assignment of Arthur I. Kendall by the Rockefeller Institute for Medical Research to work with us on the Boston Floating Hospital during the season of 1903, has enabled us to make a few scientific and clinical observations which may be of some value to the medical profession, and hence are reported. Not less important than the expert work of Kendall was the hearty co-operation of the Boston Board of Health, the facilities of whose large laboratory were placed at his disposal.

The *Bacillus dysenteriæ* was discovered by a Japanese physician named Shiga in 1898. It has many characteristics in common with the bacillus of typhoid fever, thus justifying bacteriologically the position that we have taken in favor of the use of the most careful "typhoid precautions" in these cases. It differs from the typhoid bacillus in various ways—for example, its motility and its action on mannite.

Cultures may be fed to animals without any outward effect, but when injected under the skin or into a vein a powerful toxin is developed. Flexner found the same bacillus in the Philippine Islands, and he and his assistants have since searched for and found it in many places in the United States.

This study has developed the existence of a group of these bacilli, differing from each other in some ways, but markedly similar in others. Temporarily these are divided into two classes styled "Shiga" and "Harris," respectively. Drying and sunlight quickly make them powerless, and the common disinfectant methods of typhoid fever are equally efficient, for they are found in the dejecta of patients. Moreover, agglutination tests similar to those employed in typhoid fever are successful. A drop or two of blood from a patient, diluted

* Read before the Norfolk District Medical Society.

100 times, produces clumping of Shiga bacilli obtained from pure cultures within from two to four hours. Furthermore, it has been proved that a serum may be produced from horses in precisely the same way as diphtheria antitoxin is produced, which has marked powers to render guinea-pigs immune, and which it is, therefore, hoped may be produced powerful enough to check the ravages of the germs in the human system.

The Japanese use such a serum for bacterial dysentery, and have reduced the former mortality of over 50 per cent. to an average of only 10 per cent. or 15 per cent. The Rockefeller Institute for Medical Research, of which Dr. Simon Flexner, mentioned above, is the medical director, has set itself the task of determining whether this germ, so positively identified in the East, so readily detected by agglutination tests, and so amenable to serum treatment, is the same germ which every summer carries off thousands of infants under 2 years old. In this investigation it was our privilege to be one station, similar work being carried on by other assistants in Baltimore, Philadelphia and New York.

If further work shall make it probable that the *Bacillus dysenteriæ* (Shiga) is the cause of a large portion of our cases of summer diarrhea, a method of diagnosis analogous to the Widal test will be available to the diagnostician. Moreover, the identification of the cause in this case means the immediate use of a cure. Once firmly proved, therefore, a work in no sense secondary to the introduction of the antitoxin treatment of diphtheria will have been accomplished. Hence there was marked enthusiasm in this portion of our work this last summer.

Thirty-five cases were carefully studied, and in 28 the *Bacillus dysenteriæ* was demonstrated. Twenty-three were of the Harris variety, 3 of the Shiga, and 2 showed both varieties. Of the 5 cases pronounced negative, one, No. 20, seems like a case in which nature very vigorously attempted to rid the rectum of the invading germs, which were probably derived from a younger sister very ill with ileocolitis. The great amount of mucus concealed the germ cause. Case 26 was not a very severe one, and no clinical explanation for the failure to find the bacillus is available. Case 32 was very unsatisfactory clinically as well as bacteriologically, and much surprised her visiting physician by the suddenness of her death. Cases 33 and 35 were evidently meningitis. The local pathologic lesions of what we have termed clinically ileocolitis have in each case proven to be "much thickened intestinal walls, with prominent, injected, sometimes ulcerated, follicles and a coating of thick glairy mucus." It is possible to study these cases in very many ways. It is hoped that the grouping adopted may prove of interest and value. It is practically identical with that used in the report to the Rockefeller Institute.

PREVIOUS ATTACKS OF DIARRHEA.

The histories obtained were in many instances unreliable, owing to the lack of knowledge displayed by parents in regard to previous attacks of diarrhea. In only four cases was there a history of previous enteric disturbance. Of these, Cases 11, 12 and 15 gave histories of previous attacks, during the earlier summer. One case (18) had two previous attacks, one of ileocolitis the preceding year, and a second earlier in the season of 1903.

CHARACTER OF FOOD AT TIME OF ATTACK.

Of the cases proving positive, 2 were breast-fed exclusively (5 and 14); 5 cases were fed on condensed milk alone; ordinary table diet to 3; cow's milk diluted variously with water or cereal infusions, but without regard to accurate modification had been given to 7; proprietary food alone was given to 3; in combination with milk to 4; a restricted diet of bread, beef juice and milk had been given to 3; in 1 case the diet is not stated.

DISCOVERABLE CAUSE OF ATTACK.

As to a discoverable cause, no one cause can be assigned to any case except Case 14. In most of the cases the food of the children lacked even ordinary care in its method of preparation. The milk was the ordinary milk of the household, kept in many instances in the usual unhygienic surroundings. In no case had the food been sterilized before being given to the child. In one case, a breast-fed child, the onset seemed to be synchronous with the use of a breast pump.

LENGTH OF SYMPTOMS BEFORE OBSERVATION.

The average duration of symptoms before coming under observation was seven days. The longest period was six weeks, a diarrhea of the fermental type. The shortest period was one day, a fatal case of cholera infantum. In one case there is no history of duration given.

PERIOD UNDER OBSERVATION.

The average period of observation was eighteen and three-fourths days. The shortest periods were in three cases, each of which died on the day of entrance. The longest period of observation was sixty-three days (Case 27). The average age was 10 months, the youngest patient being 3 months and the oldest 4 years.

CHARACTER OF ATTACK.

Of the positive cases, 3 are noted as mild, 5 as of moderate severity and 20 as severe. Of the mild cases, 2 were discharged well, and 1, when entirely over the enteric trouble, finally developed symptoms of what was probably central pneumonia, from which she finally recovered. Of the moderately severe cases, 1 was discharged well, 2 were relieved; 1 complicated by tubercular adenitis and chronic otitis media was discharged unrelieved, and the remaining case developed lobar pneumonia, from which she died. Of the severe cases, there were 13 deaths, 5 recoveries and 2 unrelieved, both of the latter cases dying outside the hospital.

TYPE OF ORGANISM.

Of the 28 cases, 23 were infected by the Harris type of organism, 3 with the Shiga, and in 2 cases both were isolated. The small number of cases presenting the *Bacillus dysenteriæ* (Shiga) precludes much comparison. The 3 cases presented no marked difference from the rest of the cases. The 2 cases of double infection were both severe, but had no difference in symptoms from the other cases. Of these 2 cases, 1 died and 1 recovered. Of 3 cases of Shiga infection, 1 was moderate and recovered, 1 moderate and relieved, and 1 severe case died.

BREAST-FEEDING.

There were but two cases breast-fed at the time of entrance.

CASE 5.—A boy, 11 months old, well developed and nourished, entered with a temperature of 104 F., delirious, furred tongue, mild diarrhea, 4 to 6 dejections per diem, green with mucus. On the heel of the left foot was a bleb surrounded by an erysipelatous process. Numerous abscesses of the leg developed later, were opened and evacuated. The *Staphylococcus pyogenes aureus* was isolated. There was final recovery.

As the enteric disturbance was never very annoying, and as a prolonged search of several hundred colonies revealed only one colony of the *Bacillus dysenteriæ* (Harris), the relationship as a causative factor is problematic.

Case 14 is interesting as to etiology. The mother stated that on account of a cracked nipple she had begun a week previously to the onset to use a breast pump, of which little care had been taken.

CASE 14.—A boy, 10 months old, fairly well developed and nourished, somewhat hydrocephalic, slight rosary, no teeth, anterior fontanelle 1¾ x 1 in. Dejecta 8 to 10 a day, green mucus and occasionally streaked with blood, considerable tenesmus. Temperature 99 to 101 F. Child refused to nurse, dropper feeding was resisted so as to exhaust child, esophageal feeding was regurgitated. At times nasal feeding was retained.

CASE 3.—Boy, age 2 months, poorly developed and nourished. Slight rosary. Few râles in back. Heart action weak, peripheral circulation sluggish. Child restless. Occasional vomiting. Dejecta 6 to 10 a day, green with mucus. Some tenesmus. Treatment: Stimulant and serum. Child lived 9 days. Serum given six times, 10 c.c. on consecutive days; temperature dropped from 104.8 to 96 F. Improved slightly for two days, then failed rapidly. Dejecta unchanged. Child practically moribund on entrance.

CASE 6.—Girl, age 5 months; fairly well developed and nourished; pale. Temperature 102 to 105.6 F. Pulse weak, somewhat restless at times. Child was prostrated on entrance, severe tenesmus, marked vomiting. Lived 48 hours. Dejecta 12, green fluid with mucus. Treatment: Stimulant. No serum.

SUMMARY OF CASES.

Research Number.	Hospital Case Number.	Previous Attack. Diarrhœa.*	Character of Food at Time of Onset.*	Days' food Observation.	Days under Observation.	Mild; Moderate; Severe.	Organism.	Diagnosis.	Termination.	Complication.	Age in Months.	Duration in Days.
1	13	No.	Eskay's Food; condensed milk.	4	12	Moderate.	Shiga.	Ileocolitis.	Recovered.	Rhachitis.	8	30
2	31	No.	Condensed milk	9	5	Severe.	Harris, Shiga.	"	Death.	Gastritis.	7	14
3	37	No.	Water; cow's milk.	3	9	"	Harris.	"	"	Rhachitis.	3	12
4	34	No.	Cow's milk	14	17	Moderate.	"	"	Relieved	"	6	21
5	38	No.	Breast fed.	7	35	Mild.	"	"	Well	Necrosis of skin; abscess of leg.	21	49
6	71	No.	Oatmeal water; cow's milk.	6	2	Severe.	"	"	Death.		6	3
7	64	No.	Oatmeal water; cow's milk.	7	16	"	"	"	Well		6	17
8	28	No.	Horlick's Malted Milk.	1	1	"	"	Cholera infantum	Death.		3	1
9	74	No.	Not given.	7	10	"	"	Ileocolitis.	No relief; died later.	Rhachitis.	6	10+
10	75	?	Table diet.	9	32	"	"	Enterocolitis.	Unrelieved.		48	35
11	69	4 weeks before	Cow's milk; water 50.	1	27	"	"	Ileocolitis.	Well	Rhachitis.	4	29+
12	77	2 mos. before.	Cow's milk; Mellin's food.	4	27	"	"	Ferment diarrhœa	"	"	9	28
13	86	No.	Mixed diet.	6	1	"	"	Ileocolitis.	Death.		20	7
14	76	No.	Breast.	7	16	"	"	"	"	Gastritis, otitis media.	10	23
15	109	3 weeks before	Condensed milk	1	47	"	Harris, Shiga.	"	No relief; died later.	Purpura.	6	35
16	106	No.	Condensed milk	5	5	"	Harris.	"	Death.		7	10
17	115	No.	Modified milk.	14	1	"	T. B.	"	"	Miliary T. B.	6	15
18	122	One 1 yr. ago; conv. July 17-27	Cow's milk; bread; beef juice.	3	19	"	Harris.	"	Well.	Rhachitis.	16	4
19	129	No.	Bread and milk	3	6	"	"	Enterocolitis.	Death.	"	13	9
20	Out pat.	?	Mixed diet	0	1	Mild.	Negative.	Ileocolitis.	Recovery.		48	1
21	57	No.	Oatmeal water; modified milk diluted.	5	55	Moderate.	Harris.	Gastroenteritis.	No relief	T. B. adenitis	7	49+
22	121	No.	Table diet.	5	29	Severe.	Typhoid.	Ileocolitis.	Well		24	34
23	143	No.	Table diet.	4	6	"	Harris.	"	Death?	Gastritis	12	6
24	150	No.	Milk (diluted)	9	17	Mild.	"	"	Well	Rhachitis	8	20
25	154	No.	Table.	14	4	Severe.	Shiga.	"	Death.	Lobar pneumonia; pemphigus.	33	13
26	120	No.	Eskay's food	7	34	"	Negative.	"	Well		5	41
27	73	No.	Mellin's food.	5	63	Moderate.	Harris.	"	Died.	Lobar pneumonia; pericarditis sup.	4	63
28	140	No.	Condensed milk	5	32	Mild.	"	"	Relieved	Central pneumonia	6	31
29	130	No.	Cow's milk	14	12	Severe.	"	Enteritis.	Died.	Rhachitis.	5	28
30	126	No.	Condensed milk	21	5	"	"	Ileocolitis.	"	Pleurisy.	3	20
31	164	No.	Eskay's food	2	26	"	Shiga, Harris	"	Well.	Gastritis	6	13
32	119	No.	Nestlé's food; cow's milk.	5	32	"	Negative.	Gastroenteritis.	Death.	Purpura.	4	27
33	99	No.	Condensed milk	42	22	"	"	Enteritis.	"	T. B. meningitis	3	44
34	179	No.	Condensed milk; Mellin's food.	14	21	Moderate.	Shiga.	"	Relieved	Chronic otitis media.	6	28
35	172	No.	Breast.	4	9	Severe.	Negative.	"	Unrelieved	T. B. meningitis	5	13

* No discoverable cause of the attack save in Case 14, where an unclean breast pump had been used. † Autopsy showed ulcerative colitis.

Vomiting was persistent, and toward the end vomitus contained blood in pinhead size clots. Day of death had two convulsions.

FATAL CASES.

The histories of the fatal cases were as follows:

CASE 2.—Boy, age 7 months; well developed and nourished, slightly anemic, tongue dry with white coat, collapsed and drowsy. Temperature 104 F. Very weak. Persistent vomiting. No tenesmus. Dejecta 6 to 9 a day, green mucus and blood. Died five days after entrance. Treatment: Stimulant and serum, Harris (132 F.) 10 c.c. on three days. No change after first day, when child seemed brighter. There was no change in character of pulse. The dejecta remained unchanged, but dropped in number. The fifth day temperature rose to 105.4 F., and child died.

CASE 8.—Girl, colored, age 3 months; well developed and nourished; tongue coated, fontanelle depressed; pulse weak, intermittent; extremities and skin cold and clammy; stuporous; temperature 101.5 F. Dejecta very thin, faint green tinge, four in number. Face pinched. Died a few hours after entrance. Had two convulsions. First limited to right arm. Later general. Duration of one day; vomiting and twenty dejections. Autopsy after 16 hours: Thymus to fourth rib. Pericardium about 10 c.c. fluid. Slight hypostatic congestion of both lungs. Mucosa of colon slightly injected. Cultures made from scrapings of mucosa.

CASE 13.—Girl, age 20 months; well developed and nourished. Prostrated, extremities cold and cyanosed, tenesmus. Comatose. Circulation fair. Temperature 104.8 F. Lived two

hours. Moribund on entrance. Treatment: Serum 20 c.c. No response to saline infusion or stimulation. Autopsy refused.

CASE 16.—Girl, age 7 months; well developed and nourished. Prostrated, heart sounds weak. Skin inelastic. Restless. Temperature 101 to 104 F. Dejecta 6 to 9, green with mucus and blood. Treatment: Stimulation of no avail. No serum.

CASE 19.—Boy, age 13 months; well developed and nourished. Physical examination negative. Drowsy. Slight tenesmus. Dejecta 5 to 10, brown with mucus. Mild constant vomiting. Temperature 100 to 102.5 F. Lived 6 days. Twenty c.c. serum given once without effect. Stimulation no effect. Died with meningeal symptoms, unequal pupils, Kernig's sign, retracted head, arms flexed and somewhat spastic.

CASE 23.—Girl, age 18 months; well developed and nourished. Prostrated. Temperature 104.8 F. Tenesmus. Dejecta 4, yellow green with mucus. Lived 28 hours after entrance. Treatment: Stimulation. Autopsy shows a "colon thickened, scarcely pliable. Bleb-like lesions resembling herpes of skin." Probably early stage of follicular ileocolitis.

CASE 25.—Boy, age 3 years; poorly developed and nourished. Physical examinations negative. Drowsy. Dejecta 2 to 9, green with mucus, and blood streaks. Treatment: stimulation and saline infusion; no serum. Case moribund on entrance.

CASE 27.—Girl, colored, age 4 months; fairly well nourished. Rosary. Dejecta 5 to 8 a day; greenish-yellow, with mucus. Dejections in several instances consisted of purulent material, almost wholly small, mononuclear lymphocytes. Suffered considerably from distension. The enteric trouble had ceased when signs of pneumonia appeared and failed to resolve. Postmortem examination showed suppurative pericarditis, unresolved pneumonia and a small sacculated empyema. No serum had been used. Duration 55 days.

CASE 29.—Boy, age 5 months; well developed and nourished. Some tenesmus. Restless. Dejecta 2 to 4, greenish-yellow, with mucus; gradually fell into stuporous condition. Lived 12 days. No serum used.

CASE 30.—Girl, age 3 months; well developed and nourished. Prostrated on entrance. Somewhat restless. Signs of pneumonia, in right base posteriorly. Autopsy showed bronchopneumonia. Gastroenteric tract normal. Serum 2 doses, 20 c.c. each without effect.

CASE 9.—Boy, 6 months of age, well developed and nourished; slightly anemic. In poor condition on entrance, pulse weak, 134. Temperature 103.5 F. Dejecta 8 a day, green with mucus. Under treatment 8 days. Serum given twice, 10 c.c. No apparent effect. Discharged unrelieved, died later.

CASE 15.—Boy, 6 months of age; well developed and nourished; in good condition. Restless. Marked tenesmus. Excellent general condition. Dejecta 6 to 9 a day, much mucus and pure blood. In this case there were two distinct recrudescences during each of which crops of the *B. dysenteriæ* (Harris) could be easily isolated in 24 hours. Serum was given for 15 days, 10 c.c., twice a day for one week. The course of the case was down hill. The child developed purpura. Discharged after being under observation for six weeks. Child died a week later at the Children's Hospital. Autopsy showed a much thickened but healed colon.

SERUM TREATMENT.

Of the 16 who died, 5 received serum in addition to all other treatment; of the 11 discharged well, 7 had serum; of the 4 relieved, 2 had serum; of the 4 unrelieved, all had serum before leaving us.

Of the 5 who died and who received serum, 1 received three doses of 10 c.c. each; 1 five doses of the same amount, and 3 each received one dose of 20 c.c.

Of those discharged unrelieved, 1 received two doses of 10 c.c., 1 three doses and 1 eight doses of the same amount, while the fourth had 20 c.c. at one dose.

Of the discharged well who had serum, 3 had two doses of 10 c.c., 1 three doses and 1 nine doses of the same amount, while 2 had the larger dose of 20 c.c.

One of the two discharged relieved had a single dose of 10 c.c. and the other had five doses of the same quantity.

One of the two who recovered following the single dose of 20 c.c. was 6 months old and the other 17 months old.

CONCLUSIONS AS TO SERUM TREATMENT.

Hence it does not seem that any positive conclusions can be drawn from our experience with the serum. We are confident that no harm was done. The form in which it was furnished was entirely satisfactory from a practical point of view, being, we believe, a duplicate of the way in which Mulford issues diphtheria antitoxin. If we can have a supply another year we shall be glad to try it further. We believe a stronger serum which will then be available may be more efficient.

In conclusion, I would acknowledge with thanks the assistance of the house staff, and especially of my senior house officer, Dr. John F. Fennessey, whose co-operation alone has made possible this report.

THE PANAMA CANAL AND ORAL HYGIENE.

EUGENE S. TALBOT, M.S., D.D.S., M.D., LL.D.
CHICAGO.

Among the diseases which will extensively prevail during the work on the Panama Canal is interstitial gingivitis.

In this disease the alveolar process and gums are involved, the teeth become sore and loose and finally sometimes drop out. Medically, so far as the gums and teeth are concerned, the disease is not unlike scurvy. The pathology and etiology at bottom are the same. It is caused by change of climate and food. Men going from a temperate to a hot or cold climate are quite prone to this disease. Soldiers in the Philippines, according to official report, are attacked by a disease of the gums—the teeth become sore and drop out. General Otis' (mail) report cites the case of Walter Fitzgerald, Company C, Twenty-eighth Infantry, formerly of the Montana Volunteers. This man of 23 years had been in the Philippines for a year and seven months. He was one of the first volunteers to reach Manila after Dewey's victory. Nineteen months in the tropics, subsisting on the rations of the Army, had resulted in the loss of nearly every tooth in his mouth. In a man of his age this was a rather severe attack.

The engineers and workmen on the Jungfrau (Switzerland) Railroad, after two or three weeks in the high altitude, suffer from symptoms similar to those observed in the Philippines. Food as well as climate has clearly much to do with the disease. The excretory organs do not adjust themselves to the new environment and auto-intoxication results. Intestinal fermentation, one of the great causes for this disease, also occurs. Indicanuria and allied states are symptoms of this disturbance. Vasomotor ataxia is frequent.

On examination of the officers and soldiers of two companies who had just returned from the Philippines, located at Fort Sheridan, Ill., I obtained the following data: Total number examined 127. Americans 98, Irish 12, Germans 9, English 3, Norwegians 1, South Americans 1, Danish 1, Russians 1, Cuban 1. The ages ranged from 21 to 52. By ages the following data were obtained: 21 years—8 had the disease, 22—5, 23—17, 24—12, 25—15, 26—9, 27—4, 28—8, 29—11, 30—5, 31—4, 32—7, 33—1, 34—2, 35—none, 36—1, 37—7,

38—1, 39—3, 40—none, 41—none, 42—1, 43—1, 44—1, 45—none, 46—1, 47—1, 48—none, 49—none, 50—1, 51—none, 52—1. Of the total 127, 18 were free from the disease; it was marked in 36, medium in 27, slight in 46. The percentage of those free was 14.1, marked 28.3, medium 21.2, slight 36.2 per cent.

It will be noted that the largest number of cases of the disease occurred between the ages of 21 and 30, a period of life at a constructive stage when the disease should not be present. The men over 40 were nearly all officers who took better care of their mouths. It must also be noted that these men lived most of the time in the open air. In the American Army mostly young men are enlisted. It is obvious that the effect of climate and food is very severe.

There is probably no part of the United States where this disease is so prevalent and so demonstrable as in the northwest. The sudden changes of temperature from extreme heat to cold and the passage from heated houses into the cold atmosphere, and vice versa, prevent adjustment of the excretory organs to unequal temperature, thus resulting in auto-intoxication.

The alveolar process (holding the teeth in position) is a double transitory and most sensitive structure of the body. After its development about the permanent teeth, it is only waiting for some irritant to cause a low form of inflammation in order to destroy the bone tissue. This is done by three forms of bone absorption, namely, halisteresis, Volkmann's perforating canal and lacunar or osteoclast absorption. The form of absorption most active in this disease is halisteresis. The bone is soon destroyed and the teeth loosen and drop out. It is not a painful process; the inflammation may exist for years and the patient be unmindful of its presence until the teeth loosen and are sore to touch.

The treatment indicated is both local and constitutional. The local treatment consists in the removal of the deposits about the roots of the teeth and saturation of the gum margins with iodin, or what is better still, with the following, which should be applied every other day:

B. Zinc iodid	15
Water	10
Iodin	25
Glycerin	50

The gums should be massaged three times per day with a stiff brush. They should be made to bleed freely. This will remove the congestion and stimulate the gums and alveolar process to a healthy action.

Constitutional treatment consists in removing the cause. Men going from the north should be very careful of their diet. Food adapted to warm climates should be used. Meat diet should be regulated to the capacity of the individual and as soon as possible. Faulty metabolism must be corrected. Above all, the organs of elimination must be adjusted to the environment as soon as possible. Since the alveolar processes are transitory structures and more easily affected by disease than others, they and the gums are excellent early indices of grave constitutional complications.

Nutmeg Habitation.—F. B. Brubaker reports in the *Medical Summary* that a young woman of 16, by repeated tasting of nutmegs while doing household baking, acquired a habit for the narcotic. The symptoms were weak and rapid heart, profound anemia, general muscular weakness, dyspnea and emaciation.

ROUTINE METHOD OF DETECTING AND DIFFERENTIATING REDUCING AGENTS FOUND IN THE URINE.*

W. G. DOERN, M.D.
FORT MADISON, IOWA.

It is my purpose in this paper briefly to call attention to a few well-established facts, point out some of the fallacies of our principal tests and outline a reliable and simple course of procedure for the differentiation of the various reducing agents which may appear in the urine. Most of the tests ordinarily employed are good negative tests, but to accept a positive reaction without confirmation is a frequent source of error in diagnosis, as I shall point out.

While, as a rule, we are called on to determine the presence or absence of dextrose, occasionally it is very important to determine whether or not other carbohydrates, as well as some other compounds, are present in the urine. Without exact confirmatory tests, it is practically impossible to definitely determine the presence or absence of dextrose. It is a rule with many physicians to depend on one single test for sugar, and rarely is it considered necessary to employ confirmatory tests. That such methods are not reliable will be evident if we consider the fallacies of the various tests. Some of these fallacies have been pointed out but recently, while others have long been emphasized, but still a few of the principal tests have been accepted without further inquiry.

THE COPPER TEST.

Perhaps the most popular of all sugar tests is the old Trommer test, or some modification of it. The chemistry of all copper tests is practically the same. The reagent consists of a solution of cupric hydroxid or, if the solution be older and after heating, the cupric oxid. A positive reaction consists in the reduction of the cupric oxid to cuprous oxid, which manifests itself as a yellow or red precipitate. There are some objections to Trommer's test which make it less accurate and not so convenient to use as some other solutions.

1. It requires two separate solutions to be mixed when the reagent is needed.

2. If these solutions are not used in the proper proportion a precipitate will form.

3. A large quantity of urine is required, increasing the liability of error from the presence of uric acid, creatinin and the phosphates precipitated by the KOH.

4. The test is not delicate without boiling, and when boiled becomes oversensitive.

A more convenient solution is that originated by Fehling, prepared by dissolving cupric sulphate, sodium tartrate and sodium hydrate in water. This test is more convenient because it requires only one solution, but owing to the instability of the tartrates, the solution is not permanent. The tartrate in aqueous solution, being acted on by the light and the alkali, is decomposed, and reduction takes place either at ordinary temperature or on heating, more especially if the solution be slightly neutralized by a highly acid urine. It is not an easy matter to prepare a fresh solution whenever we desire to use it, and we can not rely on an old solution. This objection has been entirely overcome by Professor Haines, who uses glycerin instead of the tartrate to hold the cupric hydroxid (or oxid) in solution, making a clear blue test solution, which does not deteriorate with

* Read at the meeting of the Lee County Medical Association, Dec. 22, 1903.

age. After a time it deposits a slight sediment which does not interfere with the delicacy of the solution, but rather makes it more sensitive for the test. Haines' solution may be accepted as a convenient and reliable representative of all copper tests. In applying the test, boil about one dram of the solution and add six drops of the suspected urine and boil again. If no precipitate forms, add six drops more of the urine and boil again. If still no precipitate forms, cool by holding the test tube under tap. If no precipitate forms, we can safely decide that no abnormal amount of sugar is present, but we should not arrive at this conclusion until the last step in this technic has been carefully carried out, for in certain solutions of dextrose, reduction does not take place until again cooled. I have found that to be true in two cases of glycosuria. I am not prepared to give an explanation for this, nor do I know that one has been offered.

Another fact which has not been satisfactorily explained is that some precipitates are red, while others are of a greenish-yellow color. The old theory is that the one is the hydrated cuprous oxid. More recently, however, it has been pointed out that cuprous oxid may exist in the two isomeric forms, the red and the yellow. The reaction is equally positive, whether the precipitate be red or yellow.

Should a positive reaction result from the application of the copper test, we can not be certain from this test that the reducing agent is dextrose, for a number of substances will produce the same reaction. Levulose, lactose, maltose, and the pentoses are other carbohydrates which possess the reducing power. Uric acid and creatinin, when present in excess, may reduce the copper solution. Certain synthetic compounds are powerful reducing agents, as glycuronic acid, normally present in small quantity but greatly increased in amount after the exhibition of such drugs as camphor, chloroform, chloral, aspirin, europhen, hydroquinone, urotropin, acetanilid, antipyrin, phenacetin, salol, bromol, salicylic acid, thymol, menthol, eucalyptus, glycerin and the aldehyds. In this era of patent medicines and home remedies, we can not know what our patients might have taken, and must be constantly on our guard. Hippuric acid, which is increased after taking benzoic acid or the benzoates internally, may reduce the solution.

Lastly, I wish to emphasize the alkaptons, which are hydroxy-phenyl-acetic acids ($CH_2[C_6H_3(OH)_2]COOH$), which immediately reduce the copper solutions, and any case in which a very rapid and pronounced reduction takes place would arouse suspicion and should lead to a very careful study of the case. The alkaptons are products of perverted metabolism, frequently hereditary in origin, and have no special pathologic significance, but must be recognized, when present, to avoid error.

It will be seen, therefore, that the reduction of a copper solution merely indicates that we must resort to other differential tests to determine the exact nature of the reducing agent present.

BISMUTH TESTS.

Bismuth solutions are used also and are very conveniently represented by Nylander's reagent. In this solution the addition of KOH to the bismuth subnitrate forms the bismuth hydroxid, and on heating, the trioxid is formed, which may be reduced to the suboxid or even to metallic bismuth, producing a black color or precipitate. Bismuth solutions are not reduced by the alkaptons, therefore they may serve to differentiate these substances from other reducing agents. They are reduced by glucose, levulose, lactose, pentoses and glycuronic acid. Nylander's reagent is very sensitive to reducing agents, but its great fallacy lies in the fact that all proteid compounds containing sulphur, on being boiled, yield the sulphur to combine with bismuth, forming the black sulphid which may be mistaken for the oxid. Not only albumin, but the nucleo-albumin (mucin), which is present in a large percentage of urines, will produce this reaction. Out of one hundred specimens of urine which I have tested, Nylander's reagent gave a black precipitate in fourteen, none of which contained sugar. Therefore, bismuth solutions may be depended on as delicate negative tests, but a positive reaction means very little.

TEST BY FERMENTATION.

The fermentation test is not delicate, because a portion of the CO_2, corresponding to 2.5 grains of sugar to the ounce of urine, is absorbed by the fluid, but it is a useful confirmatory and differential test. Glucose and levulose ferment readily. Lactose does not readily undergo alcoholic fermentation, but rapidly undergoes lactic acid fermentation. The pentoses, glycuronic acid, hippuric acid and the alkaptons do not ferment, and may thus be differentiated from dextrose and levulose, should the copper and bismuth tests have given positive results. Again, should the urine, after complete fermentation, still reduce the copper or bismuth solutions, it would indicate that part of the reduction at least was due to glycuronic acid, hippuric acid or alkaptons.

PHENYLHYDRAZIN.

The phenylhydrazin test has been highly recommended, and some eminent authorities state that there can be no substance present in the urine which forms crystals resembling those of phenylglucosazon. It has been clearly demonstrated, however, that glycuronic acid, oxalic acid, carbamid, pentoses and other substances combine with phenylhydrazin, and the crystals formed by glycuronic acid are, from all appearances, exactly the same as those of phenylglucosazon. Maltose, when present, will produce a maltosazon, which very closely resembles the crystals of glucosazon. We have, therefore, three azons produced which must be differentiated, and to do so, we determine the melting point of the crystals. Those crystals formed by glycuronic acid will melt at a temperature of 114 to 115 C.; the maltosazon melts at 190 to 191 C.; the glucosazon, in its impure form, melts at 173 to 194 C., but in its pure state, obtained by washing with water, dissolving in alcohol and again precipitating with water, its melting point is 204 to 205 C. The technic of the phenylhydrazin test, therefore, is very complicated, and is not absolutely reliable except in the hands of expert chemists.

THE ORCIN TEST.

By employing the copper, bismuth and fermentation tests we can differentiate lactose, the pentoses, glycuronic acid and the alkaptons from dextrose. The pentoses may further be recognized by the orcin test. For this purpose, M. Bial recommends a solution of ferric chlorid, hydrochloric acid and orcin, and advises that the solution and urine be heated until the first bubbles form, when, if pentoses be present, a green color or precipitate will appear. Boiling may produce the same color if glycuronic acid be present. In preparing the reagent we must be careful to use orcin instead of the orcein, which is a dye made from orcin.

The alkaptons may be recognized by a characteristic test. On the addition of KOH, with an excess of oxygen or more slowly as the oxygen is absorbed from the air, the urine becomes dark brown and finally black, if alkaptons are present.

THE USE OF THE POLARISCOPE.

Finally, we have still to differentiate between a dextrosuria and a levulosuria. It has recently been pointed out that levulosuria occurs much more frequently than has been reported, because most of the cases have been overlooked. In all of the above tests, with the possible exception of the phenylhydrazin test, levulose and dextrose give identically the same reactions, but we can certainly differentiate one from the other by the use of the polariscope. Dextrose deflects polarized light toward the right, while levulose deflects polarized light toward the left. In using the polariscope for qualitative analysis, however, we must bear in mind that (1) maltose is also dextrorotary, but its power of rotation is greater than that of dextrose. It can also be recognized by the fact that its slight reducing property is greatly increased on the addition of sulphuric acid. (2) Oxybutyric acid and diacetic acid are levulorotary, and when present, may modify or entirely overcome the dextrorotary power of dextrose, so that the polarized light may be deflected toward the left in the most extreme case of glycosuria. In such a case, however, we would submit the suspected urine to the polariscopic examination and note the degree of rotation. Then subject the urine to fermentation, and after complete fermentation, repeat the polariscopic test, when the diacetic acid, being unopposed by the dextrose, would deflect the polarized light still farther toward the left.

SUMMARY.

In closing, we may sum up the following conclusions:

1. The copper and bismuth tests are reliable negative tests, but a positive reaction must be confirmed.
2. Trommer's test is not always reliable.
3. Fehling's solution is not permanent.
4. Haines' solution is the most convenient of all copper solutions, and is reliable if the above technic is followed.
5. Bismuth solutions are not reduced by the alkaptons, and serve to differentiate them from other reducing agents.
6. The fermentation test is in itself not characteristic, nor is it very delicate, but it serves to differentiate lactose, glycuronic acid, hippuric acid, the alkaptons and the pentoses, which do not ferment, from levulose and dextrose.
7. If the completely fermented urine should still reduce the copper solution, it indicates the presence of glycuronic acid or alkaptons.
8. Phenylhydrazin test is good, but the technic is complicated.
9. Pentoses may be recognized by the orcin test.
10. Alkaptons are recognized by the characteristic ozonized alkali test.
11. Finally, we can differentiate dextrose from levulose by a polariscopic examination.

Cancer from Corsets.—In the London *Lancet*, Dr. R. A. Lucas describes three cases in which cancer was apparently caused by the friction of the pectoralis major on the edge of the corset. Each case occurred on the right side in a woman whose occupation caused much use of the right arm.

A CASE OF CIRCULAR INSANITY STUDIED FROM CLINICAL, DIFFERENTIAL AND FORENSIC STANDPOINTS.

RICHARD DEWEY, A.M., M.D.

WAUWATOSA, WIS.

WITH GROSS AND MICROSCOPIC ANATOMY OF BRAIN (FROM THE PATHOLOGICAL LABORATORY OF THE UNIVERSITY OF CHICAGO), BY THOR ROTHSTEIN, M.D., CHICAGO.

INTRODUCTION.

The case of X. merits study from several points of view: First, with reference to diagnosis owing to the conflicting opinions expressed by experts during the patient's lifetime, as to the form of mental disease; also in a medicolegal sense, on account of the great number and variety of legal contests growing out of the patient's mental condition, in which he himself actively and often brilliantly participated. The case also incidentally involves the study of a remarkable personality, and the clinical history consists largely in the narration of extraordinary acts, "antics" and vagaries of a mad but acute and brilliant mind. Finally the findings resulting from the examination of the brain present much of interest in both a positive and negative sense.

The following statement of the case has been prepared from personal observation of the patient when under my care in the State Hospital at Kankakee, Ill., in 1889 and 1890; from information given by himself in lucid periods and by family and friends; also by colleagues who observed the case; also much information has been gained from the public press.[1]

There is something lacking in completeness, owing to the fact that from 1899, when he was under my care, to 1901, the year of the patient's death, only cursory examination was secured by me.

PRELIMINARY HISTORY.

X. was born in England in 1856, and came to Chicago at 14. His father, a retail grocer, a man of unusual ability and originality, was a victim of alcoholic excesses at periods in his life, but reformed, and for twelve years kept temperate and spoke eloquently in the cause of temperance. He relapsed, and was also addicted to drug habits in his late years, and died during the patient's boyhood. His paternal ancestors, according to the patient's own statement, "for many generations were drunkards, dissipating their estates and drinking themselves into their graves." His mother, though thought to be consumptive at patient's birth, became strong and well, and now enjoys good health at an advanced age. Musical talent is a characteristic of the mother's side (For fuller anamnesis see *Status præsens* below.)

The patient in early life showed much precocity. In infancy he was believed to be affected with hydrocephalus. He had three brothers who died in early life, it is supposed of hydrocephalus. The patient's activity of mind is illustrated by the fact, stated by his sister, that at 5 years of age he had read Scott's Ivanhoe five times through. He was bright at school, and seems to have easily kept with the first in his class. He relates that when graduating in the public school and receiving some decoration for his proficiency, he resolved to seek a position on the school board of the city, and he realized his ambition in a few years. He became a successful attorney, and took an active part in politics and in social

1. A scrap book of press clippings in my possession makes about 40 newspaper columns and is far from complete.

life, enjoying much popularity, though generally considered an exceptional character.

The patient had always been subject to marked attacks of what he called the "blues," and was alternately elated and despondent in more than an ordinary degree, and often without reference to any external reason. He worked hard and almost uninterruptedly in his profession for ten years, taking very little relaxation and contesting his cases in court with unusual skill, force and persistency.

In 1885, at 29, the patient had what he called a "nervous breakdown," and was advised by his physician to take a long journey for his health. He had been actively engaged as an attorney through the battle of the C., B. & Q. Railroad with its locomotive engineers, acting as legal assistant, and during the strike was at times, according to his own statement, in positions of danger and difficulty.

Fig. 1.—Normal. Aged 31 (1887).

In the spring of 1887 he went through an exciting political campaign. The candidate for mayor whom he opposed was elected, and the patient lost his position on one of the city boards, and was for a time in what he describes as "mental collapse." He recovered soon from this, and in the summer of that year attracted considerable attention by the manner in which he performed the function of presenting to Queen Victoria the "Jubilee Address" of an association in Chicago, to which he belonged. He went to London, and by his persistence with both the home and foreign offices, and by securing the assistance of the American legation and by using the cable freely, finally secured an interview with the queen and had the satisfaction of being received by her at her residence, Osborne House, on the Isle of Wight, presenting his address and receiving a polite written reply from her in response.

After the patient's return, he caused a magnificently bound and printed volume to be published containing the address to the queen and an account of his reception, with full-length portraits of both the queen and himself included in the volume.

FIRST MANIC-DEPRESSIVE CYCLE.

The patient next drew on himself general attention in Chicago in the spring of 1889 by his exploits in the campaign for the election of city officers. He entered actively on the canvass, especially in opposition to a certain candidate of his own party, on whom he made very successful war. To illustrate his mental state, I will give some extracts taken from a pamphlet published by the patient, the introduction on which compares him with Don Quixote and General Boulanger, and says: "No such character ever before challenged attention." "Let him alone and he will be president and king of England, both at once." His proceedings during the election are then described in part as follows:

The biggest man in Chicago last Wednesday was X., also the proudest and happiest. The headquarters of both parties were nothing in comparison to his law office. He was overrun all day long, and for everyone there was a royal welcome. Everyone, friend or foe, got a word of cheer and a cigar, the like of which grows not outside Havana—a 50c "Jack Rose," fresh and fragrant, and with a delicious odor of victory about it. . . . He invited some of his intimates to a little love feast at Billy Boyle's. . . . English chops and juicy roasts were washed down with Mumm's of the extra dryest kind. When the company finally separated X. agreed with F. W. to sail with him soon for a pleasure trip to Europe. Not only had he won glory, but a mint of money. Over and above expenses he had the snug sum of $10,700 to his credit by the Democratic victory Tuesday.

He describes his exploits as follows:

On the morning of election I arose at 5 o'clock and was on horseback for eleven hours. I went from poll to poll. I would gallop up to a precinct, offer to bet $1,000 to $500 against W. and generally encourage the boys. At one polling place I came across a strolling band of Italian musicians that I at once hired for the day. One of the places visited was the ——— Club. It was ladies' day and the club was thronged. They all came to the windows, waving their handkerchiefs and throwing kisses to me. I next stopped at the ——— Club House. The members all came running to meet me, headed by my dear friend C. H. I marched into the club to the tune of "Hail to the Chief." We paraded through all the rooms and I instructed the steward that from that hour forth until next morning nobody could have anything from the bar to eat or drink or smoke without charging it to me. We went down to my house. My dear wife and my dear old mother—God bless her—and my children were standing on the steps, and the neighbors were all in their windows, and hundreds of people were in the street. The band played "Hail to the Chief," I saluted my family and friends, paid my men and went in. I immediately sent an order to G. & M. to send up several cases of champagne to the ——— Club, telephoned the Garfield Park Rosery for a hundred dollars' worth of flowers, and engaged the full Valisi mandolin orchestra to play there.

It was in the campaign above described that X. was believed to have received an injury of the head from an assault made apparently by hired thugs attacking him when passing a dark alley. Accounts differ as to the extent to which he was injured, but he was undoubtedly attacked and knocked down and received a contusion of the left parietal region, causing some swelling. He was not rendered unconscious, and a medical friend who saw him immediately after, states that the injury was

slight. It is probable undue importance was subsequently given this circumstance on account of the natural desire to find in it a cause for the insanity. It is not impossible that the concussion of this wound aggravated his natural lack of balance, but the postmortem showed that no visible traces of injury from it were present. It is certain that a considerable degree of mental exaltation (and later depression) followed the above-described campaign. X. began to show a disposition toward great extravagance, giving extraordinary presents for number and value to his friends, purchasing silk umbrellas, canes, etc., by the dozen and giving them away and buying suits of clothing for himself in the same manner, also scattering flowers in profusion among the ladies.

About this time he again announced his intention of starting for Europe. Every effort was made to dissuade him, but without avail, and when he went to New York, before sailing and while waiting there, the idea was seriously considered by his friends of committing him to some private asylum. This fact became known to the patient, who scoffed at the idea of being examined by physicians, but expressed his willingness to meet them and entertain them at dinner, and I understand that three gentlemen (one of whom was Dr. E. C. Spitzka) met him in this way, and after seeing him, agreed that he was in the early stages of an attack of insanity, but that in his present state no court would sustain an attempt to interfere with his freedom. One of the experts believed he was in the incipient stages of paresis. Of the opinions of the others I have no knowledge. X. himself assured his friends that he would oppose any attempt to interfere with his liberty or place him under control. He went to London and was absent a few weeks, passing through a brief normal interval, but his period of depression began to come on. His condition after his return home is described by the patient himself as follows:

On my return home I was undoubtedly a victim of that variety of insanity called melancholia. I had always been subject to the "blues" periodically, but at this time I thought I was bankrupt, although I was worth, as it is estimated, at least $200,000. I thought my business had left me and could not concentrate my thoughts and mind on anything except my own trials, and finally, tried to assassinate myself, like a fool (referring to an attempt at suicide, it is supposed). I was sent to the sanitarium at Wauwatosa, where I thought I was followed and surrounded by the Clan-na-Gaels and that the defense of the Cronin trial (then going on in Chicago) would be that I was a British spy—a Le Caron—and that I, with the help of my English friends, killed Cronin in the interest of the English government to besmirch the Irish leaders and throw the guilt on them.

Dec. 7, 1889, X. was brought from Wauwatosa to Chicago and found insane by the County Court of Cook County, and committed to the Kankakee Hospital for the Insane.

STATUS PRÆSENS. EXAMINATION AT HOSPITAL.

It was at the time of X.'s commitment to the hospital at Kankakee that he came under my personal observation. Particulars with reference to the condition of the patient were as follows: Native of England. Parents born in England. Father and paternal ancestors for several generations said to have been addicted to alcoholic excesses. Father, a grocer; also exhorter in M. E. Church, addicted also to drug excesses. At one time temperate for several years and eloquent speaker for temperance reform. Three brothers of patient alleged to have died in infancy of hydrocephalus. Mother in good health at advanced age; marked musical talent in mother's family. Mother at time of patient's birth thought to have been tuberculous.

Patient's recent habits in regard to alcohol and tobacco excessive. Age, 34; married; three children; one died suddenly in infancy of obscure brain disease; occupation, attorney; education, high school; weight, 178 pounds; height, 5 feet 8½ inches; head large but symmetrical; size of hat worn, 7 11/16; eyes blue; pupils normal; complexion fair; physically muscular, stout and robust and thick set; no stigmata of physical degeneration; neck large and short; tongue clean; appetite capricious; digestion good; bowels constipated; sleep irregular; state of special senses and their organs normal. Cutaneous, tactile and reflex sensibility normal, except the tendon reflexes somewhat diminished on right side; heart, lungs and pulse normal; genito-urinary system normal; no evidences of syphilis; mental state dull and depressed and silent. State of memory, perceptions and reasoning power unascertainable, but evidently much weakened; volition impaired; manner vacillating.

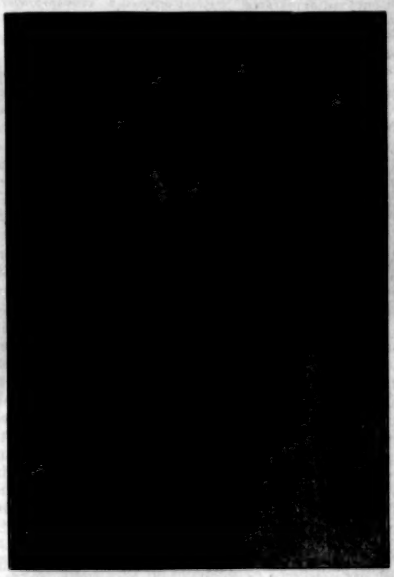


Fig. 2.—Depressed state. First cycle, aged 34 (January, 1890).

The following are notes with reference to the patient's condition:

Dec. 8, 1889. Patient dull and demented. Walks mechanically about the ward or sits by himself, having little to say to anyone. Marked retardation in movements and ideas. Does not give expression to delusions (he afterward described as having at this time the idea that he was suspected to be a British spy by the Clan-na-Gaels.

December 16. Depressed, but better. Realizes his condition and speaks of his mind as being "muddled."

Jan. 1, 1890. About the same. Does not care to see anyone

and does not want to leave the ward—even to go walking. Appetite good. Physical health good. If friends call to see him avoids them and tries to keep out of their way.

January 20. Much improved. More cheerful. Talks very freely and worries considerably for fear people will not have confidence in him when he goes out.

January 30. Much improved. Cheerful most of the time. Thinks he is about well and talks of going home.

February 11. Very cheerful. Clear mentally. Has no delusions.

February 25. Cheerful. Says he never felt better in his life.

Normal Interval.—Toward the end of February patient was in very good spirits, but not to an abnormal degree. The coming of the World's Fair to Chicago (which was determined at this time), where he had property interests which he believed would be favorably affected, seemed to exhilarate him considerably, but naturally.

March 5, 1890. Discharged. Condition sane and normal to all outward appearance. Patient advised to remain longer at hospital, but, inasmuch as there was nothing in his condition warranting detention, he was discharged, especially as his determination to go was unalterable.

About the time of his discharge the wife of the patient stated to me that she had observed periodically a rather regular fluctuation in his mental condition. She believed that there had been for many years with much regularity periods of alternate depression and exaltation, averaging about five months each with a month of natural condition between.

SECOND MANIC-DEPRESSIVE CYCLE.

Within two weeks after his release, patient began to attract attention by his eccentric conduct. He appeared in a political convention dressed in riding boots and otherwise striking apparel, and went on the stage, whip in hand, to denounce a certain candidate.

He was next heard of in Omaha and Kansas City. In one of these towns he insisted on singing "Annie Rooney" in the street, and was arrested as disorderly after a lively encounter with the police, and spent the night in the station. The papers stated that he rode on horseback up the steps of a house and pulled the bell; also that he was ejected from the stage of one of the theaters. He showed an extreme degree of sexual erethism. These things might be attributed to drink in part, but did not differ in any degree from the action of the patient both before and after, when it was impossible for stimulants to have been a factor in the case.

The patient was induced to return to Chicago, and his condition was such that his friends immediately took steps for his recommitment to the State Hospital at Kankakee, where he was again committed by the court after an absence of about one month, and on the second admission he presented a marked contrast to the condition existing when discharged one month before. His physical condition was not changed, except that he was perhaps more robust and florid,[2] but he was in a continuous state of exhilaration and restless activity, sleeping little except under the influence of hypnotics. There was now scarcely a trace of any delusion except in his exaggerated ideas of property and self-importance. His insanity was shown in his conduct more than his ideas. He was remarkably quick and brilliant in use of his mental faculties, memory accurate, logical power great, fancy, imagination and gay emotions were all highly efficient. He was, as shown later, capable of great power of attention and severe and long-sustained mental effort, as would scarcely be possible in paresis. He was irrepressibly good-natured, though occasionally having outbreaks of rage at being interfered with. In his walks over the country, around the hospital with attendants, he purchased all the real estate and stock in sight. He offered to engage at large salaries many of the attendants and officers of the hospital for his personal service. He was markedly erotic in his impulses and actions. Within a few days of his admission he was granted a hearing on application for a writ of habeas corpus. His conduct in the court room was highly eccentric, but entertaining. During his presence in the court room the grand jury were brought in to be sworn, and as they stood in a row before the judge, X. interrupted the proceeding, addressed them and stated he would subpena them all as witnesses to his sanity. He also volunteered his assistance to an attorney in a suit then in progress, correcting the attorney's mistakes and showing both ability and brilliancy in striking contrast to the blundering of counsel. When presenting his application for a writ, he was told by the judge that the case would be heard "to-morrow," whereon the patient replied: "Your honor, I stand on my constitutional rights and refuse to agree to any postponement." The judge then agreed to hear the case at once, and X. assured him that he would "do as much for him if their respective positions were ever reversed," as he (X.) expected some day to "be on the bench" himself.

After the hearing the court remanded the patient to the custody of the hospital, and, after being remanded, X. remained in a state of continuous maniacal excitement until well on in August. He was at times violent, destructive and untidy in his habits. His physical condition remained as above described. There were still no evidences of motor or sensory abnormalities, depending on any structural lesion. Though his mental condition was suggestive of paresis, it was also entirely consistent with the theory of simple maniacal excitement.

From March 31 to June 24, 1890, when X. was released by habeas corpus proceedings in Chicago, he was in an extraordinary maniacal condition, but withal very brilliant and resourceful in his mental action. (See Fig. 3.) On one occasion when out in the grounds he suddenly gave his attendant the slip and dashed into the river. He went out some distance into the water and informed all who came near that he would drown them or himself, or both, if they attempted to bring him in. He was finally secured by having an attendant make a rush for him, having a rope tied around his waist, one end of the rope being in the hands of persons on the shore. The latter grasped the patient firmly around the body and both were then safely drawn ashore.

During this time the patient seemed to believe that if he should, as he expressed it, "raise merry hell" and be sufficiently violent, obstreperous and destructive, this might effect his release from the hospital. He also sought to appear in the rôle of one who is not only illegally confined, but also shamefully abused, and was constantly sending applications to the courts to be heard on writs of habeas corpus, representing himself as the subject of outrage. When quite alone in his room in the hospital and seeing persons pass by in front of the building near his window, he would throw himself on the floor and strike and pound the floor with his own body, to make as much noise as possible, and at the same time call out in pitiful and pleading tones, "For God's sake, release me!

2. He always took on flesh during maniacal periods, as stated by Dr. Sanger Brown, contrary to usual experience, and at one time attained a weight of 375 pounds.

You are killing me with your abuse! Murder! They are killing me!" His outcry was such that a stranger would naturally imagine some one was being grossly abused. He wrote a letter, signing his sister's name, saying his mother was dying of heart disease, and wanting her son to come home at once to see her for the last time. After violently attacking attendants, necessitating a severe struggle, he would complain bitterly that he had been brutally treated, and at the same time write a letter describing the scrimmage and extent to which he had punished the attendants, adding, "I kicked two in the head and never got a scratch."

At the time of his hearing in June, on a writ of habeas corpus, he appeared in glasses and stated on the witness stand that one of his eyes had been injured by abuse at the hospital and an oculist had expressed fears that it was permanently injured, when, in fact, as I learned from the oculist whom he consulted for glasses, he had not mentioned that his eye was injured in any way. During this period his exaggerations were remarkable. He would simulate bowel trouble and allege soberly he had had over 100 evacuations in a day. The attendant reported that this was done in order to secure liquor or medicine. He alleged he was continuously closely confined 27 days when never more than two passed without his being out in the grounds for exercise. He was markedly kleptomaniacal in his propensities and everywhere he went he would take possession of all movable articles, no matter whether their value was great or small. He would entirely clear the office of pens, pencils, stationery, postage stamps, mucilage, paper weights, etc., when allowed to go into them. Among other things he carried off a bottle of red ink and soaked his hat in the ink. He also decorated it with many ribbons and streamers and wore it about the grounds. He frequently wrote orders and notes and signed the superintendent's name to them, and occasionally the orders were so clever a forgery that they would have been carried out but for the singular nature of the instructions.

In the latter part of June, 1890, X. succeeded, as stated, in being again granted a hearing in the Circuit Court of Cook County on his application for a hearing under a writ of habeas corpus.

When his case came up in court, he took the stand and made a rather telling statement, representing that his wife, from interested motives, wished him out of the way, that he had been brought back from the west by deceptive telegrams in order that he might be "railroaded" into the asylum. (It was true a telegram had been sent him that one of his children was sick in order to induce him to return.) He had met during his two or three days in Chicago before the hearing scores of his former acquaintances, and almost all agreed that he might be a little eccentric, but he was by no means insane, and promised to testify for him. Of the people numbering fifty or more who did testify that he was sane a few really believed it and thought him a much wronged man. Others complied with his request out of good nature. Still others from fear. When the hearing was over, the judge made an order releasing him, though stating at the time that he had doubts about his sanity, and the judge sent word to the probate court having charge of X.'s property that he did not think the control of his property should be restored to the patient. At this juncture X. was, in the eye of the law, a sane man when standing in the circuit court before Judge Collins and a lunatic in the probate court in the presence of Judge Kohlsaat. The judge also explained that the state of public opinion and ignorance of insanity were such that if he remanded X. to the hospital it would have the appearance of an outrage on personal liberty.

After his release the patient began a career of wild and eccentric conduct. He took his own and other young children to theatrical entertainments and kept them out until midnight, while their mothers were at home in alarm. He visited hotels and accumulated bills which he could not or did not pay. He in one instance offered to leave his children as security until he should pay a hotel bill. He was arrested for assaulting a telephone boy and given the alternative of paying a fine or going to jail. He would address ladies at hotels and on the trains who were perfect strangers and ask them to drink wine with him, and would repeat poetry to them. In spite of his antics he was much of the time an amiable and interesting companion. Flashes of wit and entertaining talk flowed from him spontaneously. There was not the slightest sign of mental weakness, but quite the reverse. In accurate memory, logical power and concentration of thought and attention he was unusual. His handwriting was slovenly, but what he wrote was always clear and cogent. He dressed himself in a way that attracted attention, wearing blue and red silk sashes, knotted and hanging nearly to his knees, and embroidered silk shirts and an undue number of scarf pins and other ornaments. One of the strongest evidences of his lack of mental balance was his utter inability to control or realize the effect of his actions, since, if he could have comprehended in the least his real position, he would have felt the necessity of moderation and sobriety, which would in some measure regain the lost confidence of his friends and the public. This he fully appreciated previously in his depressed state, and had repeatedly expressed the idea that he had been doing "a large business on a small capital;" in short had been a great fool, and feared he could never again command any confidence.

X. continued his fantastic conduct until he was again arrested in August on a new complaint of insanity and a new inquest was instituted *de lunatico*. This trial was noteworthy for the brilliant defense he made of himself, conducting his own case, and examining the witnesses in a style that placed the most learned experts at an apparent disadvantage. He furnished racy entertainment to a crowded courtroom of spectators whose active sympathy was with him and in whose opinion the alleged lunatic showed more brains than those who assumed to pronounce him insane. He was perfectly at home in the court room, inimitable in his style of conducting his case, and also displayed for a layman a surprising amount of expert knowledge in reference to insanity. In this trial the fact came out that opinions differed with reference to the form of disease with which X. was affected—a fact of which he made very telling use before the jury. Most of the witnesses claimed that he was a subject of "paresis," while others declined to state the form of disease or gave the opinion that it was *folie circulaire*. Having to examine an alienist who had pronounced him a paretic, he elicited the leading symptoms of paresis—impaired speech, unsteady gait, difference in pupils—and then exhibited to the jury his own perfect enunciation, steady movements and asked the witness to examine his pupils, compelling him to admit they were normal, and challenged him to pronounce a sentence composed of any catch words as well as he himself could, exhibiting his glib enunciation to the jury. To one of the experts who had examined him years before and who now pronounced him insane, he said:

Doctor, did I ever pay you for examining me? I do not recollect about that, but I'll do so now if you will prove that your services were worth anything.

In another case X. said to one of the experts:

Doctor, I suppose it would be impossible for me to convince you that I am a sane man, would it not?

Yes.

Well, then I won't try.

With one medical witness he had this conversation:

Don't you think that Dr. ———, who had me in charge from December until March last, had a better opportunity to notice my symptoms than you had?

He may and may not have had.

Dr. ——— says I have circular insanity. Is that so?

No; in my judgment I think not.

Then I have got you and Dr. ——— against each other.

This difference of opinion enabled X. to score an effective point with the jury and with the public.

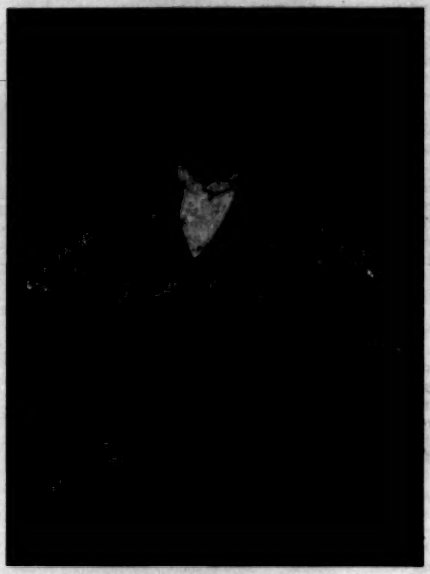


Fig. 3.—Exalted state. Second cycle, aged between 34 and 35 (June, 1890).

Being myself subpenaed as a witness, I testified as follows:

I think that X. is now in a state where his insanity is not easily recognized. However, there are things which convince me of its existence. I understand that he is by nature high-minded and truthful to the average degree. From what I have learned of him of late he is now the reverse of all this. His judgment is seriously impaired. While his mind is shrewd and cunning, and even brilliant, and his memory accurate in many matters, he fails in the exercise of ordinary judgment or common sense. X. does not at first sight appear to have illusive ideas, but on closer inspection he is seen to have these, as for instance, in his extravagant notions as to his property and as to the light he is held in by others. He told me, for instance, within a few days that he was going to run for congress this fall; that he was going to England as an envoy for the directors of the World's Fair; that he was to be attorney for the board of education; a member of the library board; and was also to be appointed on the board of trustees of the institution at Kankakee.

The inquest *de lunatico*, after lasting three or four days each week for three weeks, was terminated by the act of the judge in dismissing the case. On this occasion I had been recalled for cross examination, and, immediately on entering the courtroom saw that there had been a change in X.'s condition. He was now quiet and moderate in his speech and action. His former jaunty, jocular, "larky" air and disposition had disappeared and he seemed precisely as he was at the time when I discharged him the preceding March.

NORMAL INTERVAL.

I readily admitted that I saw nothing outwardly insane in X. at that time. The court, after this testimony was finished, stated that he would now bring the case to a close by withdrawing a juror, as he believed no reasonable person would entertain the idea that X. was insane after hearing his brilliant defense of his case.

At the time when this remarkable trial came to an end a great amount of interest had been aroused in favor of X., and it had been arranged to hold a public meeting for the purpose of endorsing him in his "fight for liberty" and of raising funds to assist him, if it became necessary to do so.

The trial came to an end opportunely for the patient, for it would have been impossible for him to appear in the character of a sane man very much longer. His phase of depression was now coming on rapidly and he went home from the courtroom to remain there, scarcely leaving the house for several months. He was profoundly despondent and possessed with the idea of some impending calamity. His friends consulted me as to the propriety of sending him to some asylum and stated he was in a condition of misery and suffering pitiful to behold. He gave no attention to business, but sat in the house. When there was any call at the door he would hasten to be the first one there, stating that he was ready, or wanted to meet some (as he thought) approaching disaster. It seems probable from his conduct that he had delusions of persecution. Here I may mention that it was usual for him to become slowly more stupid and inactive, to lie in bed, to keep his room dark, to be extremely filthy in his habits, to refuse food and to talk of suicide.

This condition continued until about March, 1891, when X. was again for a short time rational. He appeared again in public and opened an office for the practice of law. But the swinging of the pendulum to the opposite extreme was again begun, and the story already detailed of weeks and months of wild, fantastic conduct was again repeated with slight variations in detail.

THIRD MANIC-DEPRESSIVE CYCLE.

Through the month of March and up to April 28, 1891, when he was again found insane in court, X. produced a succession of sensations. He was ejected from hotels. He entered his wife's apartments through a window and carried off a quantity of jewelry. He stood at street corners and presented bouquets to ladies passing by. He had a violent scuffle on a street car with a gripman; appeared in a barber-shop minus boots, hat and coat; was obstreperous in barrooms and insisted on every one drinking with him.

To the first medical witness testifying to his insanity in the trial of April, 1891, X. said:

Dr. ———, I met you when you testified against my client

in the case of B. vs. C. in 1877, didn't I? You say I am insane. Can you point out any case of insanity similar to mine, and can you really tell whether I have paretic mania, or circular insanity, or a sore throat, or corns? You doctors are amusing cusses. You bury your mistakes, while those of us lawyers are filed for record.

The witness replied:

I'm sure you are insane, Mr. X., but I can not classify your case. It's constitutional insanity.

A verdict of insanity was now rendered, but two philanthropists who had become interested in X.'s case and thought they could care for and benefit him, interceded with the court to be given charge of him, and were allowed by the court to assume this responsibility. The sequel to the efforts of these benevolent gentlemen was what might have been expected. Within two or three days X. was again in the county jail and applied again for a writ of habeas corpus, but was refused by several judges in succession. He was now compelled to return to the Detention Hospital to await his transfer to some institution for the insane. It was for several weeks, however, found impossible to secure his admission to any public or private asylum, though application was made to a large number. It became impossible on account of his violence longer to care for him properly in the Detention Hospital and he was transferred to the county jail and finally to the Cook County Asylum for the Insane at Dunning, and was there during some months in a maniacal state. He gradually improved and was allowed to go about with an attendant on the country roads, where he amused himself by playing Robin Hood and "holding up" every person he met with a demand for cigars, money or plunder of any sort.

NORMAL INTERVAL.

He now gradually became more rational and quiet and was finally released "on probation" October 21. During the winter of 1891-1892 X. was again in a depressed and inactive state, again approximating his natural condition in the early spring, and passing through a customary normal interval.

This was followed by a gradual return of the maniacal cycle.

FOURTH MANIC-DEPRESSIVE CYCLE.

During the summer of 1892 a succession of his customary pranks and depredations attracted public attention, furnishing amusement or annovance, as the case might be. He was arrested for disorderly conduct and for disturbing the peace, and appeared in absurd or equivocal situations and adventures in towns and cities of Illinois and surrounding states, especially gaining notoriety by his exploits at the National Republican Convention at St. Paul. In the summer or fall of this year X. was again committed to the Cook County Asylum for Insane, passing through the usual maniacal exacerbation. When his condition had become more quiet he one day made his escape with the assistance of a woman who drove through the grounds and took him into her carriage. This escape was planned by assistance of outside persons and a disguise furnished X. consisting of a woman's clothing. The winter of 1892 and 1893 appears to have been uneventful, and apparently in the spring of 1893 the usual "March madness" did not occur. X. went to Colorado in the summer of 1893 and made special effort to control himself with a view to regaining control of his property, which was still in the hands of a conservator. He was at this time more mildly maniacal, though, while stopping at Colorado Springs, he attracted much attention and at times people avoided the Pike's Peak cog-wheel railroad trains when he was aboard and the hotels and public places where he disported himself. From this time there was greater irregularity in the cycles and the normal intervals were less marked. At the meeting of the American Medico-Psychological Association in Chicago in June, 1893, he attended one of the sessions and requested to be allowed to address the association, and while sitting in the meeting fell asleep in his chair. He had grown very gross and corpulent. There appears to have been from this time a more decided moral and mental deterioration. Though he still at times was brilliant and able to carry on spasmodically a law business consisting largely of habeas corpus proceedings and attempts to release patients in asylums, he never equaled his former achievements, and evidence of degeneration was shown in many acts, foreign to his normal self, of an indecent or quasi-criminal character.

(To be continued.)

A CASE OF PARASITIC HEMOPTYSIS OR INFECTION WITH THE DISTOMA WESTERMANII.

A. D. MACKENZIE, M.D.
Attending Physician to St. Vincent's Hospital.
PORTLAND, OREGON.

The value of the examination of sputum for tubercle bacilli depends almost solely on their presence, and it is generally recognized that repeated failure to find them does not exclude the existence of tuberculosis in the lungs.

This fact is intimately connected in its relation to differential diagnosis, with the characteristics of the sputum in parasitic hemoptysis, for in this disease some of the general symptoms of tuberculosis, such as emaciation, general weakness and anemia, are usually associated with the continued expectoration of blood-stained, mucopurulent material. There are obvious reasons, especially applicable to certain parts of the United States, why parasitic hemoptysis should be excluded in cases suspected of being tuberculous, and in which the sputum is free from tubercle bacilli, although it continuously possesses various admixtures with blood.

This is illustrated by the following account of a case admitted to my service in the St. Vincent's Hospital of Portland, Oreg. It is, so far as I am aware, the first instance of parasitic hemoptysis observed on this continent.

History.—A Japanese man, a native of the province of Okayama, was admitted Nov. 23, 1903, suffering from weakness and persistent hemoptysis. He arrived on this continent the preceding April and had been employed by the fish canneries of Vancouver and Victoria during the summer.

His first attack of hemoptysis occurred July 17, 1903, while rowing a boat against a strong tide in the Columbia river; four or five ounces of blood, described as bright red, escaped by coughing. A cough with blood-stained expectoration continued after this attack, with slight intermissions, until he applied for admission to the hospital. Friends accompanied him to the hospital, desiring assurance that he did not have tuberculosis.

Examination.—At the time of admission he had lost some weight and complained of slight transient pains in both sides of the chest, in front and behind, and varying from day to day in location. On examination cogwheel respirations and a hemic murmur were found; the chest was well developed. Although the chest was carefully examined at different times dur-

ing his stay at the hospital, both by myself and by other members of the attending staff, the few alterations mentioned were not supplemented.

During his stay in the hospital blood was always found in the sputum; for a time it resembled pneumonic sputum, later a microscopic examination was necessary to find the blood. At times there were found little yellow particles in the sputum like plugs of bronchioles; they were frequently tipped at one end with clotted blood. Repeated examinations of the sputum were made for the tubercle bacilli with uniformly negative results. There were no accounts of tuberculosis in the family history and he had never been sick before; with exception of gonorrhea several years before, from which recovery was prompt.

The ova of the distoma were finally found in the sputum and their nature confirmed by Dr. C. W. Stiles of the U. S. Bureau of Animal Industry; Charcot-Leyden crystals were also abundant.

He had no temperature, ate and slept well and gradually so recovered that longer retention in the hospital was impossible. The hemoglobin was 70 per cent. (Tallqvist) and examination of the corpuscles of the blood revealed no noteworthy alterations in number or character.

There are recorded three instances in which observations have been made in this country of pulmonary infection in animals with parasites of this variety, the first by Ward[1] in a cat, the second by Kellicott and Ward in a dog, the third by Payne and other members of the Bureau of Animal Industry in hogs. These observations have formed the basis of a number of publications, of which those by Ward, and by Stiles and Hassall, deserve special mention. The infection in hogs was observed in Cincinnati where, for a period in 1898, 1 per cent. of the animals inspected were found infected. The flukes found in the cat concerned an animal of Ann Arbor; those in the dog were found in Columbus, Ohio.

In other countries, other observers, including Kerbert, who named the parasite after Westerman, have found it in the lungs of the tiger. In Japan, dogs and cats both serve as final hosts. Although there are differences noted in the descriptions of this trematode, as it occurs in man and animals, the reasons for considering that separate species have been described are as yet insufficient. Likewise the Asiatic and American forms are believed to be identical, although, as stated by Stiles, a zoologic error may be made, in so doing, in the interests of hygiene.

There is every reason to believe the infection in the case here reported was contracted in Japan. The disease is endemic in the province Okayama from which he came; in fact, it was to this province that Yamagiwa and Inoui were sent by the Japanese government in 1890 to study the disease.

Most of the writings concerning the disease have been by the Japanese, and unfortunately they are, to a large degree, in that language. Two of the articles by Yamagiwa,[2] one by Katsurada,[3] and the recent one by Taniguchi,[4] however, are in German, and contain references to the accounts of many of their countrymen.

As at present understood, the *Distoma* or *Paragonimus westermanii* is responsible for two widely different forms of disease in man—the pulmonary and the cerebral. In both, cysts are likely to be found as the chief anatomic change. Those in the lungs are usually in the upper lobes and near the surface where they may form brownish or darker projections. Their shape is described as flat (Yamagiwa) or round (Katsurada), and their size about that of the tip of the little finger. When they contain parasites there is also a viscid brownish-gray fluid, and the lining is rough, ragged or wrinkled. They rarely contain more than a single worm in man. Their firm walls measure a millimeter in thickness, and are formed solely by the tissues of the host.

Participation of the bronchi and bronchioles in the formation of such cysts by dilatation was demonstrated by Katsurada in dogs and cats, but not in human lungs, although these channels always lead into the cysts. In the lungs so infected a bronchitis occurs with a mucopurulent and hemorrhagic exudation, as well as various forms of pneumonia, depending on the stage of the infection and on repeated infection. The nodules forming about the ova are said to simulate chalicosis, and in one case (Case 1 of Katsurada's article[5]) the lung was very cirrhotic from the disease; bronchiectasis and emphysema may be consecutive changes. Nodules inclosing ova and resembling tubercles may occur in the pleura.[6]

MEASUREMENTS OF OVA OF THE DISTOMA WESTERMANII.

FROM KATSURADA.		FROM MY OWN CASE.	
LENGTH.	BREADTH.	LENGTH.	BREADTH.
102.5	52.5	99.7	60.0
100.0	66.3	99.5	63.7
97.5	52.5	95.4	57.0
97.5	56.3	94.5	61.5
95.0	67.5	94.5	55.5
95.0	55.0	94.5	60.5
95.0	55.0	93.7	53.2
92.5	60.0	93.0	55.5
92.5	57.5	93.0	55.5
91.3	55.0	93.0	54.0
91.3	52.5	93.0	60.0
90.0	55.0	93.0	49.5
88.8	57.5	91.5	58.5
87.5	57.5	91.5	52.5
87.5	56.3	91.5	54.0
		91.5	55.5
AVERAGE.		91.5	54.0
93.5	57.0	90.7	52.5
		90.0	57.0
		90.0	49.5
		90.0	55.5
		90.0	52.5
		90.0	52.5
		88.5	49.5
		88.5	61.5
		88.5	51.0
		87.0	58.5
		87.0	54.0
		87.0	60.7
		86.2	48.0
		85.5	52.5
		AVERAGE.	
		91.33	53.18

Considerable interest is connected with the origin of cysts in the brain on account of the degree to which the softening following embolism is responsible for their formation. They are described as varying in size from a grain of rice to a pigeon's egg, or larger, and communicating.[6] In one case no cavities occurred, but instead dark fibrous nodules inclosing ova.[3]

In the cerebral cysts, or more correctly, pseudocysts, both adult worms and ova have been found. In 11 cases of parasitic hemoptysis, in which Inoui observed cerebral symptoms, there were six in which the unilateral spasms were in some cases accompanied by paresis, two with general epilepsy, two with hemiplegia and one with psychic blindness.[4] In the case reported by Taniguchi, in addition to the usual symp-

1. For bibliography see Notes on Parasites 51.—The Lung Fluke (Paragonimus Westermanii) in Swine, and Its Relation to Parasitic Hemoptysis in Man. Sixteenth Annual Report, Bureau of Animal Industry, U. S. Dept. of Agriculture, 1899, 560, by Charles Wardell Stiles and Albert Hassall.

2. Virchow's Archiv, 1890, cxix, 447, and 1892, cxxvii, 446.

3. Ziegler's Beitrage, 1900, xxviii, 506.

4. Arch. f. Psychiatrie u. Nervenkrankheiten, 1904, xxxviii, 100.

5. In Miura's description of such nodules in 1899 (Virchow's Archiv, cxvi, 310), the ova are mentioned as being those of the common liver fluke; this has been corrected by subsequent writers.

6. I have been unable to find any account in Miura's article, of the cerebral infection referred to by Stiles and Hassall.

toms of epilepsy, those of athetosis and chorea were present. His anatomic study of the brain lesions led him to believe the walls of the cysts were, in part, formed by the vessels by which embolism occurred.

In other parts of the body either the ova or worms have been found in the liver, orbital cavity, lower eyelids, scrotum, mesentery, diaphragm, omentum and in the contents of the intestine.

Thirty-one of the ova were measured by Dr. E. R. LeCount of Rush Medical College, Chicago, care being taken to select such as were yet unbroken.[7] The sizes (see accompanying table) were found to correspond fairly well with the measurements given by most authorities, particularly those of Katsurada.

ILLEGITIMACY AN ECONOMIC PROBLEM.

JAMES E. DAVIS, M.D., PH.G.
Obstetrician to Mercy Hospital and to Salvation Army Rescue Home.
DETROIT.

"To such grievances as society can not readily cure, it usually forbids utterance on pain of its scorn; this scorn being only a sort of tinseled cloak to its deformed weakness."—Currer Bell, quoted by Shirley.

"The duty of Christian society is to find its work and to do it."—Carlyle.

"Society is organic; that is to say, it is like an organism, in that it is composed of interdependent parts performing functions essential to the life of the whole."[1] The conservation of the race when economically considered, begins with the personal unit, which has both known and unknown values. The unknown unit, plus environment and heredity, represents a known quantity, which becomes a factor in the product of society. Environment and heredity are always subject to the qualifications of "accidentals," which may be either voluntary or involuntary.

"Clear knowledge is confused when we can not distinguish the parts and qualities of the thing known, and can only recognize it as a whole."[2] Thus it follows that it is the "accidentals" which are the confusing factors in our political science. "The life of society may be conveniently divided into eight parts, called life-spheres, viz.: (1) language, (2) art, (3) science and education, (4) family life, (5) social life in the narrower sense, that is, the intercourse of friends and associates; (6) religious life, (7) political life, (8) economic life."[3]

The problem of illegitimacy has a vital position in six of the eight spheres. The personal unit may or may not be privileged a volitional environment; a specific example of the first would be that of the child which chooses a new home with foster parents and a changed society life before his sexual education begins. The resultant changes will be commensurate with the fixation processes of the environment, and the contrast of the two possibilities will be less or greater as the heredity is paralleled or opposed. Add to this the compliment of accidentals, which is subject to the same law as heredity.

The example of denied volitional environment will, as a rule, trend toward a phase of life having the least resistance, which has, in most instances, been made by heredity. The possibility of accidentals that parallel the hereditary taints is greatly increased.

Heredity may be either primary or secondary to environment. If primary, then it follows that the heredity had its beginning in the class of accidentals. To exemplify, it is sufficient to instance the accidentals which occur in a line without taintured chastity when amatory passion is causative of procreation out of wedlock.

The certainty of heredity in its primary form, causing an environment for the succeeding generation, is well established, and "it is a general biologic law that the lower the position of an animal in the scale of being, the greater its capacity for the reproduction of its kind."[3] "Hereditary tainture existing in an environment of its kind, is procreated through succeeding generations in the case of bastardy to an astonishing degree," as is graphically shown in the tables of Spitzga[4] and of Dugdale.[5]

The term "accidentals" is here used advisedly and for convenience, there being no English word to distinguish—in contrast to the woman who professionally sells herself—the one who lapses through imprudence, ignorance or passion, and afterward recovers and leads a reputable life. To this class is assigned all women of good heredity, good environment and heretofore unquestioned chastity, who yielded to temptation from causes that were immediate and seemingly insuperable.

Illegitimacy in its generic sense is an inadequate term, referring specifically to the state of being born out of lawful wedlock. In this paper the term is used to designate a vice, in which is the implication of a child, a mother, a father, the relatives, friends and community. It is the purpose of social economics to apply principles to problems connected with the growth and well-being of organized society.

It is the intent of this study to submit statistics and other material which can be used for inductive and deductive reasoning toward the formulation of applied principles for a subject which can be said to have substantially a very meager literature and comparatively few investigators. The difficulties that confront the student of illegitimacy are evident to all who have given the subject but little attention.

The general rules[6] of method in composing any discourse require, first, that nothing should be wanting or redundant; second, that the separate parts should agree with each other; third, that nothing should be treated unless it is suitable to the subject or purpose; fourth, that the separate parts should be connected by suitable transitions.

It is impossible to exclude the evidence of statistics in a scientific study of illegitimacy, and it is impossible to include them for all geographical divisions. There are in the United States 53 states and territories (including the Hawaiian Islands and Alaska). Of this number, 39 have state boards of health. Letters of inquiry for statistics relative to illegitimate births were sent to every secretary. Replies were received from 25 of the 39; 19 replied that there were no statistics taken. Many do not have any record of births, while some do not keep even death records.

Six states—Connecticut, Minnesota, Rhode Island, North Dakota, Indiana and Michigan—have records. In every instance the figures were affirmed by the secretaries to be unreliable, therefore of little value excepting

7. The stage micrometer employed (Beau, Hausser et Cie, Paris) contains 100 lines to one-fifth of a millimeter.

* Read before the Wayne County Medical Society, Detroit.

1. Ely: Political Economy, pp. 5-6.
2. Leibnitz: Jevons' Lessons in Logic, p. 55.
3. McKim: Heredity and Human Progress, p. 120.
4. Spitzga: The Legal Disabilities of the Natural Child, Alienist and Neurologist, October, 1899.
5. Dugdale: Table 5, The Jukes, p. 27.
6. Jevons' Logic, p. 202.

for yearly comparisons of state averages. The secretary of state for Michigan, Hon. Fred M. Warner, estimates that probably only about two-thirds of the total number of actual births are being returned. In Michigan, during 1900, only 322 illegitimate births were recorded, the total of all births being 43,699. I was able to collect with little effort from seven sources 466 illegitimate births for 1903 in the city of Detroit.

Eight letters were sent to the registrars general of provinces in the Dominion of Canada, and six replies were received, Ontario being the only province that kept records.

I am indebted, as are all who find interest in the statistics submitted below, to the deputy registrar general of Ontario, and the adequate system of record taking that prevails in this province.

TABLE I.

Total of all births for 1902	47,796
Total of illegitimate births for 1902	819
Total of illegitimate births, male, for 1902	418
Total of illegitimate births, females, for 1902	401
Ratio of illegitimate births per 1,000 of all births	17.1
Ratio of illegitimate births per 1,000 of all births in 14 cities	50.9
Ratio of illegitimate births per 1,000 of all births in country alone	.13

TABLE II.

The four counties having the highest illegitimate birth rate compared, showing the city and the country ratios:

York County—	
Country ratio	23.9 to 1,000
City of Toronto	53.5 to 1,000
Carleton County—	
Country ratio	6.1 to 1,000
City of Ottawa	104.7 to 1,000
Middlesex County—	
Country ratio	6.5 to 1,000
City of London	50.7 to 1,000
Frontenac County—	
Country ratio	10.9 to 1,000
City of Kingston	59.4 to 1,000

TABLE III.

A comparison of the illegitimate birth rates, cities in England, Ontario and Scotland:

London, England, in 1880	38.0 per 1,000
Birmingham, England, in 1880	45.0 per 1,000
Liverpool, England, in 1880	58.0 per 1,000
London, Ontario, in 1902	50.7 per 1,000
Toronto, Ontario, in 1902	53.5 per 1,000
Kingston, Ontario, in 1902	59.4 per 1,000
Ottawa, Ontario in 1902	104.7 per 1,000
Glasgow, Scotland in 1887	83.0 per 1,000
Edinburgh, Scotland in 1887	85.0 per 1,000
Dundee, Scotland, in 1887	104.0 per 1,000
Aberdeen, Scotland, in 1887	106.0 per 1,000

The second rule of method is observed in deduction only, and the remaining rules are observed as closely as is consistent with the peculiar nature of the subject.

The economic problem before the practitioner of medicine, philanthropic worker and sociologist is that of prevention and cure of this macula of unchastity. For the purpose of securing unbiased premises, available literature was consulted, and thirty letters were addressed to experienced workers in widely distributed parts of the country, asking for answers to the following questions. The references and replies, as far as possible, are used, and credit given for the same in the subjoined bibliography:

1. What do you consider the chief causative factors of illegitimacy?

2. What practical preventative measures would you suggest for illegitimacy?

3. In the treatment of illegitimacy as a sociologic evil, would you advise the utmost personal secrecy of the individuals involved?

4. What is the best care of the bastard child for the economy of society, considering first the child, second the mother, third the father, fourth the relatives, friends and local community?

5. Is the lying-in hospital that extends care especially to illegitimate mothers a means of encouragement for the crime? (b) Are such institutions prophylactic against homicide, infanticide and suicide?

6. To what extent can the physician act as a safeguard to society in cases of illegitimacy?

7. In your experience, what percentage of illegitimate mothers are restored to their former position in society? (b) And what percentage go on to greater degradation?

The chief causative factors of illegitimacy are:

1. Insufficient instruction in the phenomena of sexual life, particularly of girls.[7 8 9 10 11 12]

2. "Incontinence on the part of the male, combined with the passive submission of the woman," with mutual passion prevailing.[13 7 14]

3. Faulty guardianship.[8 10 14]

4. Seduction under promise of marriage.[15]

5. "Lack of means to establish a home" and other impediments to marriage.[11]

6. The general servility of women and aversion to marriage on the part of males, and a prevailing notion that hard work is disgraceful and that good clothes are a necessity.

7. The remoter causes of heredity and environment have been proven to be important considerations[16 17 18]

8. *Conclusion.*—Leffingwell[16] has tersely summarized the causes in the following: "Illegitimacy is a phase of social phenomena produced by conjoint action of several causes. Its variance in the different localities depends on the force and number of the factors there present."

Pertinent to the subject are the words of Shakespeare: "Find out the cause of this effect, or rather say the cause of this defect. For this effect defective comes by cause."[19]

The aforegoing enumeration of causes alone suggest inferential preventative measures, which are tersely expressed by Professor C. R. Henderson[20] as "all the positive educational, moral, religious agencies which raise ideals, teach young girls their nature, dangers and duties, and give them a rational way of spending their leisure." To this must be added "early marriage" for the passionate.[21 22 18]

Leffingwell[23] says: "The influence of religion is one of the most powerful agencies against unchastity," and Dr. Howard A. Kelly affirms that the "Christian standard is the solution of the whole problem" of unchastity, as is expressed in the quotation: "Mortify, therefore, your members which are on the earth; fornication, uncleanness, inordinate affection, evil concupiscence and covetousness, which is idolatry, for which things' sake the wrath of God cometh on the children of disobedience."

All these excellent preventative measures must fail, and do fail, as statistics prove, for want of direct and specific application in much the same way as the physician does who prescribes water to stop hemorrhage, without informing the ignorant regarding the necessary tem-

7. Dr. Joseph B. DeLee, Chicago, private communication.
8. Hastings H. Hart, LL.D., Chicago, private communication.
9. Dr. Chas. H. Bushnell, Chicago, private communication.
10. Adjutant E. Bailey, Los Angeles, Cal., private communication.
11. Dr. W. P. Manton, Detroit, private communication.
12. Dr. Denslow Lewis, Chicago: Limitation of the Venereal Diseases, Medicolegal Jour., June, 1903.
13. Dr. J. J. Mulheron, Detroit, private communication.
14. Dr. Charles Pike, Philadelphia, private communication.
15. Mrs. H. C. Sterling, Detroit, private communication.
16. Leffingwell: Illegitimacy, pp. 64-85.
17. Dugdale: The Jukes.
18. Ernest Bicknell, Proceedings of National Conference of Charity, 1896, p. 223.
19. Hamlet, Act. 2, Section 2.
20. Prof. C. R. Henderson, University of Chicago, private communication.
21. Mayo Smith: Statistics and Sociology, p. 81.
22. Dr. J. H. Carstens, Detroit, private communication.
23. Leffingwell: Illegitimacy, conclusion 7, p. 86.

perature, mode of application, etc., or the text-book of medicine that dismisses the treatment of a disease after stating that opium is indicated. The merest tyro in medicine or in social economy knows the value of the remedies in a general way. But this is probably parallel knowledge of that possessed by the man who says—I know opium relieves pain.

Is it not enough to say to the boy or girl—here is the moral law, hear it, read it, obey it, for it is the best advice in all phases of your life? The sexual nature must be plainly outlined by personal interview and confidences secured. Now is the time when profoundest wisdom and most careful judgment is demanded. The prophylactic suggestions must be given with the utmost care, and control taught through the specific means which is most directly applicable.

The question of utmost personal secrecy of the individuals involved admits of discussion. The answers received show that 75 per cent. favor secrecy. The following are among the reasons assigned: (*a*) Secrecy at this time is dealing with the fruits and not the root of the evil.[7] (*b*) Publicity causes loss of self-respect, and thus removes the chief bar to prostitution. It also serves to advertise the woman before men as susceptible material for extended liberties.[15] (*c*) These unfortunates have no chance in life with public opinion against them, for the disposition of society is relentless and unforgiving. (*d*) The return to society is made a personal responsibility with the mother when her secrets are preserved.[16] (*e*) The bastard is made to wear a lifetime label, which has the weight of personal guilt, and friends to whom not even hereditary implication can be imputed are disgraced, and "Good name, in man and woman . . . is the immediate jewel of their souls."[24] (*f*) Publicity is frequently the most active goad to the acts of abortion, suicide and infanticide. It is said[25] that "in order to lessen the frequency of abortion and remove some of its temptations, regulations prevail in some of the large lying-in hospitals of Germany, whereby each patient is known only by a number given her on entering, a duplicate of which is written on a sealed envelope in which she has inclosed her name, the address of friends, or any item she may choose. This is returned to her unopened on her departure from the hospital without mishap. The child is taken with her, or may remain in a ward of the state at her option."

Among the reasons given for publicity are the following: (*a*) The fear of publicity is a wholesome safeguard as far as the young man is concerned. The young woman should tell her parents, if they are people of any character, for the reason that if she does not do that she must lie from first to last, and you can not build character on a lie.[8] (*b*) Evils thrive in the dark.[14] The arguments for and against publicity are significantly strong, and it is evident that neither absolute secrecy, as is practiced in some of the German hospitals, nor the full publicity which is given the legitimate birth, can be best for all concerned. The following conclusions are drawn: The question of secrecy should be subservient, first, to the best interests of the child. It is the one most wronged, and should receive every advantage of all possible reparation. It is a human soul, and must outweigh all other results of the illicit act, such as the personal disgrace and the insult and injury to society. To society the mother is a unit of depreciated values, and is thereby the second most important result of illegitimacy. The best care of the child and mother is the best care for every phase of the problem.

In the event, then, of publicity serving the means of justice for child and mother by compelling the father to do his duty, whatever this may be, under the circumstances, secrecy would here be an injustice. The laws of Illinois[26] provide that the father may be compelled, if able, to make provision up to the sum of $550.

When a woman's parents are deceased or are individuals without character, or when it can be learned that they would cast off their erring child, and when the father of the child is a worthless wretch, absolute secrecy should be imperative. The resident of the rural district, town or small city will require secrecy more than the resident of the large city.

I believe most emphatically that the causes of illegitimacy should be published widely, and all possible emphasis placed thereon; but in the great majority of instances the results should be kept a profound secret.

The best care of the illegitimate child is that by its parents, providing they become man and wife. If practicable, every just means should be used to bring about this union. Of the answers received, 94.3 per cent. advise adoption into childless homes in from one to twelve months after birth; 75 per cent. urge adoption when the child is about one month old. Prof. C. R. Henderson of Chicago University[27] forcibly says: "Foundling asylums, baby farms and agencies which take babies from their mother's breast, and ask no questions, are murderers wholesale." This statement may seem unwarranted and altogether too radical, but on examination of certain records a mortality of 98 per cent. was shown. Leffingwell[27] affirms that in civilized England illegitimate bastard children are more than four times as liable to "accidents" as their legitimate kindred, and the same writer quotes the registrar general, who pointed out that during the first year of life the mortality of legitimate children was about 205 per 1,000, while the illegitimate rate was 418 per 1,000.

A most interesting field of investigation is suggested to me, viz., that of the milk supply from the breasts of illegitimate mothers. The following tentative theories are advanced on evidence thus far examined. The lacteal secretion of the illegitimate mother is markedly uncertain. The quantity is lessened and the quality impoverished. A number were found to have almost total cessation of secretion before the first three months were past. The supposition advanced is that involuntary nursing is a leading cause, supplemented by the disturbed mental tranquility. It is observed that abscess of the breast during the nursing period in this class of mothers is almost unknown. If a tentative conclusion can be made and proved, it will show that the illegitimate mother is incapable, physically, in the majority of instances. When there is added to this financial and social difficulties, the situation is well-nigh impossible. There is also a great probability that the illegitimate child, when old enough to be taunted about his disgraceful birth, will promptly despise his mother. The continuance of the illegitimate child in an environment parallel to its heredity is usually a grievous error, as shown by Dugdale[28] in his study of the Jukes. Of 535 children born, 106 were illegitimate, a ratio of 235 per 1,000. The members of the family that changed their

24. Shakespeare: Othello, Act. 3, Section 3.
25. W. M. Capp, M.D.: Medical and Surgical Reporter, Oct. 11, 1890.
26. Hastings H. Hart: The Physician and the Illegitimate Child, Illinois S. M. A., 1902.
27. Leffingwell: Illegitimacy, pp. 70 and 73.
28. Dugdale: The Jukes, p. 26.

environment at a sufficiently early period were able in most instances to amend hereditary habits.

The conclusion is drawn that the best care of such a child is adoption within one year, or better, one to three months, into a childless family, which has been investigated by a government agent, and by a responsible representative of the child.

The care that is best for the child is, as a rule, best for the mother, the father, relatives, friends and community. The early adoption of the child affords the mother every opportunity for restoration to her former place in society, providing secrecy has been maintained. She is thus able to obtain opportunities for marriage that would be impossible excepting with the lowest of men, were the sign of her fall with her. I have a record of eleven women, nine of whom are living in Detroit and two in the country. All of these are honorable wives and good mothers. All but one informed the prospective husband of her former misfortune, and in each case the man expressed himself as glad that the woman did not deceive. The one woman who did not confide her secret is in great fear of it being revealed. It is very true in this application that "hope deferred maketh the heart sick." If a woman in the sorest trial of her life can entertain no hope for her future, the liability to greater degradation is very certain.

Sanger,[20] in his "History of Prostitution," says that 57 of every 100 children born by women who are now prostitutes, were fruit of promiscuous intercourse, and that one-half of the prostitutes of New York City have given birth to children, and more than one-half of these are illegitimate.

The committee of the New York State Senate,[20] appointed to investigate prostitution, reported in 1892 that there were 50,000 prostitutes in New York City. Of this number some 12,500 had given birth to illegitimate children. These facts and figures indicate most pathetically the inefficiency of the method used by society for the care and restoration of its unfortunate illegitimates.

It is a frequently heard accusation that lying-in hospitals encourage crime. If such institutions are agencies for houses of prostitution, or if the management is by unprincipled and immoral individuals, the reputation is justly given. But the idea that honestly managed lying-in hospitals are causative of this evil is preposterous. It is just as logical to say the physician who cares for an illegitimate mother during her confinement is encouraging the evil by his professional care of its result, not of its cause.

Dr. Joseph B. De Lee[7] says the argument is ridiculous, and asks the question, Does the general surgical hospital increase the number of street brawls with cracked heads?

The contemplation of a child, much less that of a hospital, never enters the minds of the child's parents at the time of their fall. It is always an afterthought.

It is one of the highest privileges of the lying-in hospital to be the means of prevention for infanticide, suicide and homicide. An average of 50 per cent. of all applicants solicit abortion or have attempted the same.[13] The physician, more than any other public servant, is the guardian of the sexual morals of the community.[20]

Each physician should consider it his privilege and duty to carefully study the social economics of illegitimacy, so that he can act intelligently in giving advice that is protective to life and society.

The percentage of restorations will depend to a large degree on the class of girls. Dr. Charles Pike[14] and Adjutant E. Bailey[15] estimate that 90 per cent. of all cases where it is a first offense are restored under proper treatment, while about 5 per cent. pass on to a greater degradation.

831 Fort Street, W.

20. Sanger: History of Prostitution, p. 676 and addenda.

ENORMOUS MIXED TUMOR OF THE PAROTID REGION

REACHING TO THE CLAVICLE AND WEIGHING ABOUT SEVEN POUNDS; OPERATION; RECOVERY.*

W. W. KEEN, M.D., LL.D.

Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College.

PHILADELPHIA.

The Patient.—E. M. B., aged 65, was admitted to the Jefferson Medical College Hospital, Jan. 2, 1904, at the request of Dr. H. M. Righter. Height 5.7 feet, present weight 152 pounds weight in 1890, 250 pounds.

History.—His father died at 49 of "dropsy of the brain"; his mother at 56 from pulmonary tuberculosis. One sister also died of the same disease and another after some gynecologic operation; one brother died from accident; one sister is living and well. Tuberculosis exists both in his father's and in his mother's families, but he does not know the precise individuals who have suffered from it. He is married and has five children, all of whom are living. He had varioloid when he was 22 years old. He has suffered from hemorrhoids and from neuralgia of the face. He was discharged from the Army in 1863 on account of "dropsy of the kidney." He drinks beer moderately; smokes a pipe almost constantly.

Development of the Tumor.—In November 1890, when shaving, he noticed a small lump in the right parotid region. It did not cause him any pain, nor was it tender at first. By 1893 the tumor was large enough to attract the attention of others. By 1892 it had grown to the size of a large walnut. At this time it was manipulated considerably by a physician, and from this he dates its rapid growth. He states that it has doubled in size during the last two years; has never noticed any effect on the flow of saliva. On Dec. 7, 1903, at the inferior border, the tumor opened and there was a forcible discharge of a fluid containing blood. He states that it broke with such force as to cause a hissing sound at first. About two pints of fluid escaped. For two years he has not left his house on account of the annoyance he experiences from everybody's looking at him.

Examination.—On admission there is noticed on the right side of the face and neck an irregular nodular tumor (Figs. 1 and 2) starting just in front of the ear, passing over the lower jaw, under the chin, and extending about 5 cm. to the left of the median line. It extends a little below the level of the clavicle and passes up the back of the neck not far from the median line. The circumference of the tumor horizontally is 63 cm. and vertically 67 cm. The horizontal diameter is 21 cm. and the vertical diameter 27 cm. The present size of the tumor, when the photographs were taken, is markedly less than it was before it broke.

The tumor does not seem to be deeply attached to the larynx or to any of the bones in its neighborhood, the jaw, the mastoid, or the transverse processes of the vertebræ. It is most firmly attached in the parotid region, but below this it can be swung through a considerable arc in all directions. The skin is movable over the tumor; its blood vessels are dilated, and its surface is rough, and at points ulcerated. At the lower border is an opening about the size of a lead pencil. Considerable fluid discharge constantly escapes from this opening. The fluid is brownish yellow, thin and watery. The tumor is composed of nodular masses of greater or less size, many of the larger ones have smaller nodules arising from them. They are elastic, yet firm. Portions of the tumor are evidently cystic; others

* Read before the College of Physicians of Philadelphia.

are either fibrous or cartilaginous. There are certain areas of tenderness over it. He has rarely had any pain excepting when it was distended by fluid before its rupture. The tumor is very heavy and drags on the face and neck so much that both for support and also to retain dressings over the sinus at the lower portion, he slings it by a bandage over his head.

Examination of the Body Fluids.—The urine is of amber color, turbid in appearance, specific gravity 1,026; acid reaction, urea 2.6 per cent. By the microscope a few squamous and columnar epithelial cells and a few leucocytes are found.

Examination of the blood showed hemoglobin 78 per cent., erythrocytes 4,830,000, leucocytes 7,800, color index 0.81.

The examination by Dr. Stelwagon of 55 c.c. of the fluid discharged from the tumor showed it to be a cloudy, yellowish-pink fluid which, on standing, separated into two distinct layers, an upper clear and a lower cloudy stratum. The reaction was neutral to both litmus and phenolphthalein, specific gravity 1,008, that of the normal saliva being 1,002 to 1,006. Sulphocyanid is absent. It is highly albuminous as shown by Tanret's reagent, heat and nitric acid. There was also a small amount of mucinoid substance. A very faint trace of the nitrites was present. Neither sugar nor other reducing agent was found either in the solution or the sediment. The specimen was tested for the presence of ptyalin or other amylolytic enzymes by the admixture of the solution with soluble starch; the resulting mixture was then digested for one hour at 40 C. and tested. The test for erythrodextrin and sugar proved negative. Microscopic examination showed the sediment to consist of many polymorphonuclear leucocytes and a few erythrocytes; no epithelium nor salivary elements were found.

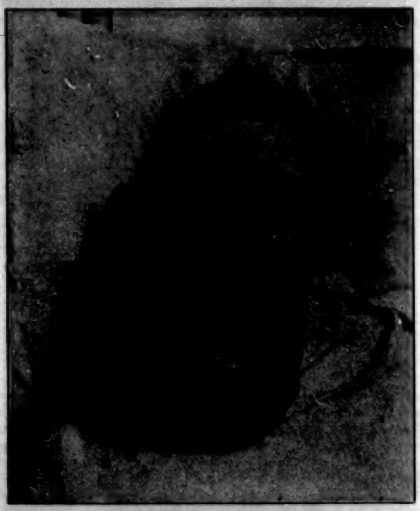


Fig. 1.—Tumor seen from the front.

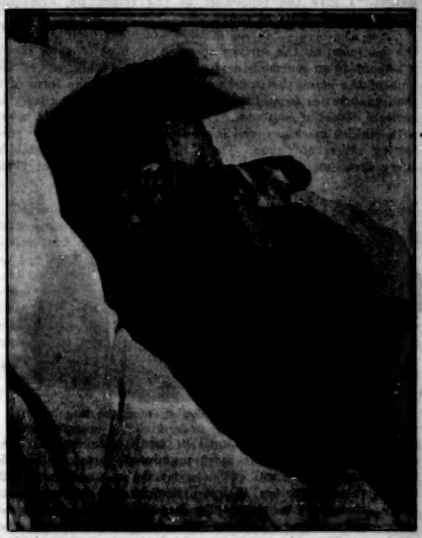


Fig. 2.—Tumor seen from the side.

Operation.—Jan. 6, 1904. Drs. Hearn and Stewart, together with the house surgeon, Dr. Gillette, kindly assisted me. I first made an incision from the ear to the collar bone, a little internal to its vertical axis, thus passing over the tumor in such a direction as to give me a considerable anterior flap. This was dissected from the front and the inner side of the tumor; then dragging the tumor outward with retractors, I was able gradually to separate it from all the deeper tissues of the neck, including the jugular vein and carotid artery. The tumor was very adherent to the vessels, the sterno-cleido-mastoid and the auricularis magnus; a number of branches of the facial were unavoidably divided, though I did not recognize any of them. A number of large veins emptying into the jugular were found on the surface of the tumor. Each one of these was double ligated and divided. By the weight of the tumor the submaxillary gland was drawn down over the anterior surface of the tumor to the level of the upper border of the thyroid cartilage. This was dissected off the tumor and the facial artery, which passed through it, was double ligated and divided. I then formed a posterior flap of skin similar to the anterior and finally removed the entire tumor. At probably a dozen or fifteen places the fascia between the lobules was spread out in dense fibrous layers, which had to be divided one after another, the division of each one enabling me to roll the tumor outward with greater ease. In the parotid region, in dissecting it out, a moderate amount of the parotid gland was removed. As there was considerable oozing over the entire surface, I placed two layers of iodoform gauze on the surface, inside of this two layers of plain sterile gauze, and closed the entire wound, leaving gauze protruding at lower end.

During the operation he was given four pints of salt solution and two drams of adrenalin (1 to 1,000) gradually administered. The operation lasted an hour and ten minutes.

Blood Pressure.—The blood pressure the day before the operation by the Riva-Rocci apparatus, was 164. mm. When the etherization was begun the blood pressure was 210 mm. It rose within ten minutes to 230, but when the first incision was made it fell to 205. At the same time the pulse, which before etherization stood at 80, gradually rose during the etherization to 125, where it stood at the time of the first incision. The blood pressure rose slightly after the operation was begun and then, as it was continued, fell to 185 at the end of the first half hour. The infusion of adrenalin and salt solution was then begun and the observations on the blood pressure necessarily were interrupted by this procedure, as it was necessary to use the left arm for both these observations and the infusion, since I was standing on the right side, and could not allow the right arm to be used. After the operation the pulse remained at the same level, 125, but the blood pressure had fallen to 110 mm.

Convalescence.—His highest temperature after the operation only reached once a little above 99 until one week after the operation, when it rose once to 101. The cause for this was perfectly clear. The incision was close to the corner of the mouth on the right side. The operation necessarily paralyzed the seventh nerve, which was involved in the tumor, and in consequence of this, there was a constant dribbling of saliva. This produced a slight infection at the middle of the wound, and delayed the final healing for a considerable time. Other than this he made a perfectly smooth recovery.

Examination of the Tumor.—At the time of the operation, a culture was taken from the discharge through the open sinus. Prof. W. M. L. Coplin reported that after 48 hours a pure culture of *Staphylococcus pyogenes albus* was present. Specimen (Fig. 3) shows the tumor and the large cavity in the center. The size of the tumor was 25 cm. long and 17.5 cm. in diameter. The weight was 2,440 grams, over 4¾ pounds, to which, before the rupture, should be added over two pounds of liquid, which escaped, making the tumor originally about seven pounds in weight. I give the remainder of the report by Professor Coplin and Dr. Ellis in full:

Gross Anatomy.—"A long incision which has been made into the specimen, on the surface opposite the area of skin, shows it to contain an enormous cavity that forms a large part of the bulk of the mass, the tissues described being in the form of a shell that varies from 1 to 8 cm. in thickness. The cavity is entirely devoid of contents. The limiting wall is grey in color, with pinkish markings, and is made exceedingly rough by projecting ridges of tissue. These ridges traverse the wall in every direction, and are from 1 to 3 cm. in width at their

Fig. 3.—The tumor after removal, showing the large cavity.

bases, narrowing outward until in many instances they become very thin at their most prominent parts. Owing to the curvature of the wall of the cavity the external margins of two of these ridges are, in some sites, brought in close proximity, the spaces between them leading into pocket-like recesses which closely approach the external surface of the specimen. The ridges are formed of tissue similar to that making up the exterior of the mass. The incised surfaces are grey in color and have a cartilage-like consistency. At several points the density of bone is almost or quite attained.

Microscopic Examination.—"Small portions of the specimen were fixed in Bensley's and Zenker's fluids and in 10 per cent. formalin. The gross specimen was preserved in Kaiserling. Blocks of tissue from the former were dehydrated, cleared and infiltrated with celloidin. Sections from these blocks were stained with hematoxylin plus eosin of Van Gieson, toluidin blue, thionin, Mallory's reticulum stain, and Weigert's stain for elastic tissue.

"Histologic study of the sections shows them to be composed of very diverse structures. Those including a part of the external surface of the tumor show a thick fibrous capsule. The external portion throughout, and at some points nearly the entire substance of this capsule is extremely dense and practically a vascular fibrous tissue. The inner portion is less dense, contains distinct blood vessels, and in some areas is quite cellular in type. At certain points are small areas of adipose tissue, adjoining which are variously shaped small open spaces in the dense outer portion of the capsule that appear to be included fat. Within the capsule are areas of the tumor composed of cells within a matrix of either fibrous or myxomatous tissue or areas of cartilage. The cells are mainly round or oval, with here and there a few that are spindle shaped. In some areas they form distinct masses, with but scanty intercellular substance, while in others they line spaces, presumably lymph spaces, being here from one to many layers thick. As previously stated, the supporting structure in some of these areas is fibrous tissue, which in some instances forms distinct trabeculæ. In other areas the matrix is myxomatous. In certain of these areas the cells are numerous, forming quite distinct masses; in others they are comparatively scanty, being arranged in narrow bands that cross each other in such a way as to give a distinct plexiform appearance. Here the cells are oval or flattened in shape and the nuclei stain poorly, contrasting markedly with the masses of larger, round, deeply staining cells, which in many instances are separated from them only by a moderately wide band of fibrous tissue. The former present the appearance of true sarcoma cells, and have among

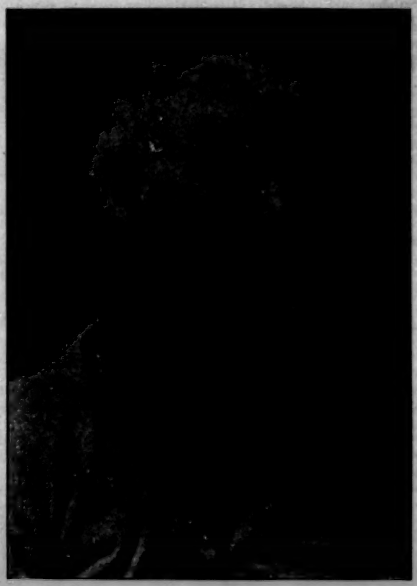


Fig. 4.—The patient three months after operation.

them numerous thin-walled blood vessels, while the latter are undoubtedly derived from the endothelial lining of the spaces which they enclose.

"Many of the sections are composed partially, in some instances almost wholly, of cartilage. This is usually fibrous in type, though areas of the hyaline variety are to be noted. The capsules of many of the cartilage cells are wrinkled and contracted. In a few areas bone formation has been attempted as shown by the presence of osteoid tissue containing lacunæ and distinct cells, but lacking true lamellæ. At some points the stroma between masses of the tumor cells has undergone hyaline change, giving such areas a very close resemblance to the so-called cylindromas.

"Sections which include the inner surface of the tumor, the wall of the large cavity, show it to be bordered by softened, fragmented and slightly necrotic tumor tissue. A few polymorphonuclear leucocytes are also present.

"Sections stained for elastic tissue show an abundance of

that structure in the stroma of the tumor, especially in the less dense areas where the cells are least numerous.

"Sections stained by carbol-thionin show in some areas an exceedingly fine network that stains a distinct reddish tinge.

"*Diagnosis.* — Myxo-chondro-lymphangio-endothelioma. Although no salivary gland structure has been found in the sections studied, the specimen conforms in every particular to the mixed tumors which occasionally originate in those organs, particularly the parotid."

REMARKS.

The diagnosis and structure of these mixed tumors of the parotid region have been so thoroughly considered by Dr. O. A. J. Kelly[1] and Francis Carter Wood,[2] that I do not consider it necessary to consider them here anew, as I could add nothing of importance.

From the surgical point of view, the slow and later the rapid growth, the enormous size (certainly the largest tumor of the neck I have ever operated on), his age and the fact that I was able to dissect it away from the important structures, especially the blood vessels of the neck, and the very happy recovery of the patient, justify the report of such a case.

I may add that not only is he well, but, having been practically imprisoned in his house for over two years by reason of his annoyance when people observed him, he now once more freely goes out and mingles with his fellow-creatures. The operation has given him a new lease of life. The only price that he pays for it is a long visible scar and paralysis of the right seventh nerve, a small price for such a delightful relief. Figure 4 shows the result three months after operation.

Clinical Report.

REMOVAL OF PIN FROM LUNG PER VIAS NATURALES.

WITH BRONCHOSCOPE AND TUBE FORCEPS.*

E. FLETCHER INGALS, M.D.
CHICAGO.

History—A young woman suffering from a foreign body in the lung was referred to me, March 23, by Professor Senn. She stated that nearly a year ago she had drawn a large glass-headed pin into the trachea, and that it had caused severe cough, expectoration, and at times choking spells and pain. About six weeks ago Dr. Allison of Brownwood, Texas, had done tracheotomy, but as it was impossible to find the pin he had closed the wound, which had healed quickly. A radiograph taken at the Presbyterian Hospital located the pin, head downward in one of the divisions of the right bronchus.

Operation.—I operated the next day, assisted by Drs. G. H. Kennett, A. M. Corwin, O. T. Freer and N. P. Colwell. I first administered gr. 1/60 of atropin hypodermically to check secretion, then gave chloroform, and when anesthesia was nearly complete, sprayed the larynx and trachea once with a solution of cocain, 10 per cent., and suprarenalin 1 to 4,000 guarded by atropin, strophanthin, carbolic acid and oil of cloves as in the solution I use for anesthetizing the nares. I then introduced a Killian bronchoscope, 34 cm. in length and 8 mm. internal diameter, through the larynx down into the right main bronchus, and one of its larger branches. The parts were illuminated with a small (Chicago Electro-Appliance Co.'s) No. 1 (cold) lamp with carrier 33 cm. in length, that I had made for the special purpose. The secretions and a very little blood were repeatedly swabbed out with cotton and the parts touched with the same solution of cocain. I carefully explored the three branches of the bronchus, and with a blunt hooklet searched for the pin which I did not succeed in bringing into view for about three-quarters of an hour.

Finally, with the hooklet, I brought it across the end of the tube and demonstrated it to Professor Senn and to E. J. Senn, S. A. Friedberg, J. F. Dolamore, E. L. Kenyon, to my assistants, and to several other physicians who were present. I then caught it with Killian's tube forceps and tried to bring the end of it into the bronchoscope but although I released it several times and manipulated it in various directions, I could not succeed, therefore, I finally grasped it firmly and drew it and the bronchoscope out together. In doing so the pin was bent to an acute angle near the head, and that it caused some injury to the parts was evidenced by a little soreness the next day, but this disappeared in a few hours. There was a temperature of about one degree two or three hours after the operation, but no fever subsequently. Three days later she returned to her home in Texas.

The pin was of brass, 4 cm. long and the glass head measured 5.5 by 6 mm. in diameter. It was apparently lodged in a division of the bronchus passing downward and backward, but I was unable to see the head at all, and could see nothing of the pin itself until I swept it across the end of the tube with the blunt hooklet.

1. Philadelphia Monthly Medical Journal, February, 1899.
2. Annals of Surgery, Jan. and Feb., 1904, pp. 57 and 207.

* Preliminary report to the Chicago Laryngological and Climatological Society, April 18, 1904.

New Appliance.

AN ARMY SPLINT.

HOWARD W. BEAL, M.D.
Late Assistant Surgeon U. S. Army.
WORCESTER, MASS.

During an army service of three years, including transport, field and hospital duty in the Philippines, the need of a leg splint that could be used for emergencies in the field, as well as for fixed dressings in the hospital, was often seen, and it was to supply this need that the splint here described was devised. When I was assigned to the surgical service of the First Reserve Hospital in Manila, the base hospital of the Philippines, the leg-splints on hand were inadequate to supply the hundred surgical patients, as there was no efficient leg-splint obtainable for general field or hospital use, and for any immobilization it was necessary to improvise with straight splint and plaster, a slow and unsatisfactory method.

THE CABOT SPLINT.

The splint is a modification of Dr. A. T. Cabot's posterior wire leg-splint which has been in use at the Massachusetts General Hospital in Boston for the past twenty years. The Cabot splint (Fig. 1) is made of a round, wrought-iron rod, three-eighths of an inch in diameter, shaped into a long rectangular frame, extending from the fold of the buttock to an inch beyond the heel, where it turns at a right angle, making a foot-piece, twelve inches long. The cross-piece, at the fold of the buttock, is slightly curved to the line of the thigh, and completes a rigid frame which, when padded, supports the leg. In the hospital the various lengths required are kept prepared for immediate use.

An important advantage of the splint emphasized by Dr. Cabot is its use in cases of discharging sinuses of the leg or thigh. In these cases, the cross-winding near the wound is omitted, and the rod is covered with a waterproof protection, as oil silk, which permits the wound to be dressed without disturbing the immobilization.

THE ARMY SPLINT.

The modification of the Cabot splint for army service consists in folding the foot-piece on the leg rods, and arranging the leg rods and thigh cross-piece to allow extension. (Fig. 2.) A rivet hinge is placed at the junction of the foot-piece and leg rods, and to secure firmness, the rods of the foot-piece are carried up one inch inside the leg rods, where the ends are flattened in outward curves to clasp tightly the under half of the leg rods. (Fig. 3.)

The leg extension is obtained by two closely approximated square rods, each having at its end a rectangular collar closely fitting the accompanying rod. (Fig. 4.) The extension of the

cross-thigh piece (Fig. 5), which is slightly curved to fit the back of the thigh, is secured in the same way as the leg rods, but with flattened collars. The leg rods are so adjusted that opening the cross-thigh extension (Fig. 5, B) releases the leg rods so they will slide to any desired length, and closing the cross-thigh extension (Fig. 5, A) locks both the cross-thigh and leg extensions at any point.

Fig. 1

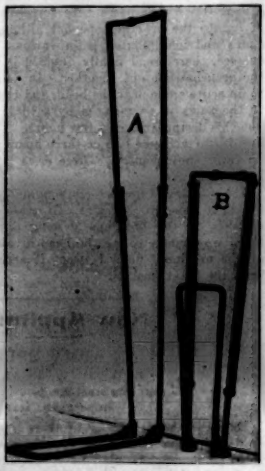


Fig. 2.

Fig. 1.—The Cabot posterior wire splint.
Fig. 2.—The Army splint.. A. Extended. B. Closed.

Fig. 3.—Showing detail of mechanism at junction of foot-piece and leg rods. A. Extended. B. Closed.

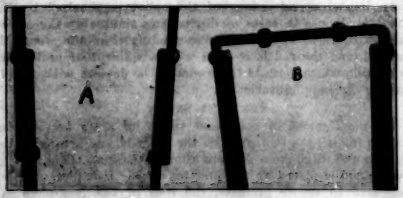


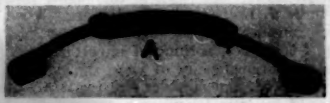
Fig. 4.—Showing leg rods. A. Extended. B. Closed.

The splint folded is twenty inches in length and weighs three and a half pounds. It occupies little space and can be easily transported, two points of vital importance for the military surgeon in the field.

For use as a field or emergency splint, the foot-piece is unfolded, the cross-thigh extension opened, the leg rods extended to the desired length, and the cross-thigh extension closed to lock the leg extension. A blanket is folded to the length of the leg and foot-piece (Figs. 6 and 7), and on this the leg and foot are fastened to the splint with bandages, or any straps available.

PADDING THE SPLINT FOR HOSPITAL USE.

For hospital use, the splint is prepared as is the Cabot splint, by first winding the rods spirally with a narrow band of cotton



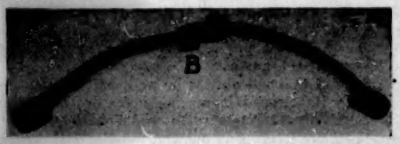


Fig. 5.—Cross-thigh piece. A. Closed to lock itself and leg rods. B. Opened to allow leg rods to slide to desired length.

Fig. 6.—Showing method of preparation for field or emergency use with folded blanket.

Fig. 7.—Showing field or emergency use with blanket—completed.

"sheet wadding" (Fig. 8, A) then cross-winding the entire frame with bandage to make the bed of the splint (Figs. 8, B, and 12, A). On this bandage bed is placed a thick pad made of four or five pieces of sheet wadding folded to the shape of the splint, and extending from the cross-thigh piece to the ankle. (Fig. 9.) A small additional pad is placed between the layers to fill the popliteal space (Fig. 9, BB), and the whole padding held on the frame by four or five pieces of tape or narrow bandage. (Fig. 9, CCCC.)

The foot-pad is made by covering heavy pasteboard (which has been cut to fit the foot-piece) with sheet wadding an inch thick,

with an outer cover of muslin, and fastening this around inner edge of bandage-covered foot-frame, with pins. (Fig. 9, AA).

On this padded splint, the leg is held by straps of adhesive plaster (Fig. 10), the heel occupying the vacant space between the foot-piece and the padding at the ankle. The leg is then wound with a layer of sheet wadding torn in strips, five or six inches wide, rolled, and applied spirally. (Fig 11, A.) The leg is now bandaged from the toes to thigh. (Fig. 11, B).

This is sufficient for ordinary immobilization of the leg, but in case of fracture, three "side-splints" are added, to maintain the position of the reduced fragments. The "side-splints" (Fig.

Fig. 8.—Showing method of preparation for hospital use. A. Winding rods with strip of cotton sheet-wadding. B. Cross winding rods with bandage.

Fig. 9.—Showing sheet-wadding padding. A A. Foot-piece pad. B B. Popliteal pad. C C C C. Narrow bandage or tape holding padding to splint.

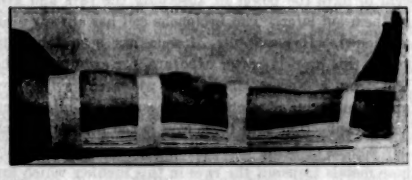


Fig. 10.—Showing leg held on splint by adhesive straps with pad under strap at tubercle of tibia.

12, BB) are pieces of straight board, four inches wide, one-fourth of an inch thick, and one inch longer than the splint, padded on the inner sides with a thin layer of sheet wadding and covered with muslin. One of these is placed under the bandaged leg between the leg rods of the splint; the other two are placed on the sides of the leg, and the inner sides padded by enclosing folded towels in half sheets or pillow cases, folded to fit the lateral contour of the leg, to maintain the lateral position of the fragments. These side-splints are held on by four strong straps made of cotton webbing, one and one quarter inches wide. (Figs. 12, E, and 13).

ADVANTAGES.

1. The splint will fit any leg, thus avoiding the necessity of making several splints of different lengths.

2. Its simplicity, lightness and compactness make it valuable for all conditions of army field and hospital service.

Fig. 11.—Showing method of winding and bandaging the strapped leg. A. Cotton roll of sheet-wadding. B. Bandage.

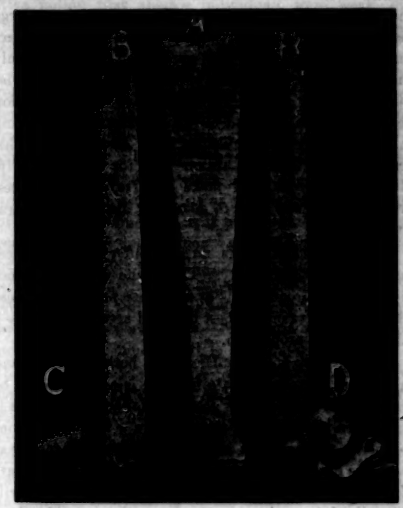


Fig. 12.—A. Splint wound with bandage. B B. Side splints for use with fractures. C. Cotton roller. D. Folded bandage. E. Cotton webbing strap to hold side-splints.

Fig. 13.—Showing side-splints applied for fracture.

3. The Hospital Corps of the Army can be taught its field use, with its preparation and use for hospital cases, thus establishing a uniform and efficient method of immobilizing every kind of leg injury.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

103 DEARBORN AVENUE . . . . CHICAGO, ILL.

Cable Address . . . "Medic, Chicago"

Subscription price . . . . . Five dollars per annum in advance

SATURDAY, APRIL 30, 1904.

THE ATLANTIC CITY SESSION.

Considerable space in this issue is taken up with matter relating especially to Atlantic City and to the coming session of the American Medical Association, including the programs of the sections. The promise for a large meeting is greater than for any previous year. The fact that the railroad rates are so favorable will certainly encourage many to attend who would not otherwise think of doing so. Never before has the Association had better than one and one-third rates when meeting in the territory of the Trunk Line Association. This year, however, the rates are one fare for the round trip, plus $1.00, which will make the traveling expenses, even for those who have to go a long distance, comparatively low.

In the matter of hotels, no place offers better inducements than Atlantic City. Those who desire to economize will find good hotels at moderate prices, and those who want to live on the best can find accommodations—and prices in proportion.

Atlantic City is a popular resort, both in winter and in summer, but the climate in June is all that could be desired. The time is also a good one, for the reason that it is between seasons, and the pleasure resorters will not be there—to any great extent at least. The fact that the place of session is so close to the thickly settled part of our country and to the principal medical centers, will naturally favor a larger attendance than would otherwise be the case.

At the session held in Atlantic City four years ago 2,019 were registered, and last year at New Orleans 1,993 were registered. If such a large attendance could be had at a place so far from the majority of the members as New Orleans, we may expect at least 50 per cent. more at Atlantic City this year, on account of the nearness to the center of population, the splendid hotel accommodations, and other advantages.

We print the programs of eleven of the twelve sections, and a cursory reading of these will convince anyone that the scientific work alone ought to stimulate many to attend. Each section offers most excellent scientific work, and there is much to attract not only the ultrascientific man and the specialist, but the general practitioner also.

The local profession has worked hard to make the session a success, and we do not doubt that those who go only for pleasure will be well satisfied with the entertainment that will be accorded them.

The section meeting places are more compactly located than they were four years ago, and consequently "that tired feeling," that was complained of at Atlantic City before, on account of so much walking in going from one section to another, will be avoided.

Altogether the outlook for the session is unusually bright. The stimulus of the organization movement which has swept over the country, and the features of Atlantic City, which we have mentioned above—all these will combine to make the fifty-fifth session one of unusual interest.

THE N RAYS.

We recently spoke of the discovery of the remarkable N rays and commented on their sources. The properties of the rays have been determined sufficiently so that the rays may be properly classified. They are reflected from polished surfaces, such as glass, and are also refracted, as is shown by the fact that they can be focused by means of a quartz lens. It should be stated that several foci may be obtained in this way, indicating that there are rays of different wave lengths. The index of refraction was found by Blondlot to vary from 1.04 to 1.85. Wave-length determinations vary from 0.008 μ to 0.018 μ. They are, therefore, rays of very short wave lengths, and the above measurements place them in the spectrum far out beyond the ultraviolet. The rays can be polarized, differing essentially from x-rays.

The penetrability of these rays is remarkable. They pass through plates of tin, copper, brass, aluminum, steel, silver, glass, mica, paraffin, fluorin, sulphur and wood. They are arrested by lead, rock salt, platinum and water. A salt solution is very permeable. A piece of cigarette paper when dry or moistened with salt solution is easily penetrated, but when moistened with water is quite opaque to the rays. Certain substances seem to have the power of absorbing the rays and giving them out later. The Leclanche cell has already been mentioned. Hyposulphite of soda has been found to possess this property after exposure, for example, to the light from a Nernst lamp. Sea water emits the rays for a time after exposure to the sun. An interesting fact in connection with these rays is the property which they possess of being transmitted by a metal wire. Only those metals transmit the rays in this manner which are penetrated by the rays. They have been transmitted a distance of 10 meters. It is necessary for the surface of the wire to be smooth or polished in order to conduct the rays; if the surface is oxidized it no longer conducts them. Therefore, the property of reflection may be the determining factor here, as pointed out by Bichat, the process being analogous to the phenomenon of the conduction of light through a piece of curved glass by the principle of successive reflection.

The N rays do not have any effect on a photographic

plate directly. However, the effect which they exert on a luminous source, as a small electric spark or a flame, can be recorded by means of photography, and Blondlot[1] shows some very clear pictures illustrating this. Very recently he has observed rays which have a shorter wave length, and which, instead of increasing the luminosity, decreases the luminosity of a phosphorescent screen. These rays he has called N_1. They are emitted by compressed caoutchouc, celloidin and ivory, pieces of silver iodid and ice near the temperature of zero. These rays diminish the sense of smell, vision and hearing, thus apparently acting in an opposite manner from the N rays.

Interesting application has already been made of the physiologic facts observed concerning N rays. Ballet has studied the emission of these rays in certain pathologic conditions. He found that in myopathies, neuritis and acute anterior poliomyelitis there was a noticeable decrease in the emission of these rays along the course of the nerves as compared with the normal emission. In hemiplegias and spastic paraplegias the emission of rays is increased. In diseases, therefore, involving the lower neurons there is a diminution, and in those involving the upper neurons there is an increase in the emission of rays from the peripheral nerves. Thus there seems to be an exact correspondence between the emission of rays and the activity of the neuron. Charpentier claims that he could detect rhythmical alterations, corresponding to inspiration and expiration, in the phosphorescent screen when placed over the respiratory centers low down in the occipital region.

Naturally many have been skeptical concerning the observations made by the Nancy physicists, and have called into question certain phases of their work. Swinton,[2] while not absolutely denying the existence of the rays, is strongly inclined to think that many of the observed phenomena are due to heat rays, and has performed some experiments to prove this. Charpentier gives what seems to be very conclusive evidence that the N rays are entirely different from heat rays. For example, the contraction of the muscles of a frog's leg, which may even be below the temperature of the screen and the room, furnishes the rays in abundance. He also made careful determinations of heat effects with the electric pile, and comes to the conclusion that the heat rays are not responsible for the increased luminosity observed in the screen. Walsham and Miller[3] and also Hooker,[4] in England, have confirmed the work of the French, and agree with them perfectly regarding the fundamental facts. Work in the *Lancet* laboratory has also confirmed these observations. The evidence in favor of these rays is accumulating so rapidly and is at present so convincing that their existence can hardly be called into question.

1. Comptes Rendus de l'Acad. des Sciences, No. 8, 1904.
2. The Lancet, London, March 5, 1904.
3. Ibid., Feb. 27, 1904.
4. Ibid., March 5, 1904.

IRON THERAPY.

The history of the employment of iron in therapeutics is most interesting, and is full of lessons in drug application and their supposed effects. Iron has been used empirically so far back as any definite knowledge of medicine goes. Its medical uses are mentioned by Pliny, who evidently recognized definite indications for its employment. It was employed long before it was known that iron existed in definite quantities in the body, and that the affections in which iron seemed to do good were really those in which there was a marked diminution of the normal amount of iron. There seem to be some grounds for believing that the reason why iron was employed at first was no better than the primitive notion that anemic individuals were weak, and that somehow iron out of its strength supplied them with renewal of vigor.

Therapeutics have been enriched by really efficacious remedies in much more modern times without any better reason than this. The fact is that Sydenham's expression, "To the worn out and languid blood, iron gives a spur or fillip whereby the animal spirits, which before lay prostrate or sunk under their own weight, are roused and excited," is as good a basis for the use of iron in medicine now as it was in his day. We must confess that we do not know how it acts, and that even now the rationale depends rather on our knowledge of its clinical value than on all the supposed reasons for its efficaciousness, which have supposedly been furnished by physiologic therapeutics. It remains an empiric and not a rational remedy. It is sometimes the custom to think that it is belittling to use remedies for which we have only empiric reasons, and Sir William Gowers was not far off when he recently said: "I yield to no one in my sense of the importance of the rational in therapeutics, but we need to be careful lest, in contrasting the rational and empirical, we allow our esteem for the one to induce a depreciation of the other."

There was a time, and that not very long since, when there was almost universal consensus among authorities in therapeutics that iron was an example of the use of a specific in medicine. Then came a period in which it was considered to be rather a nutrient in the sense that it supplied a deficiency in the tissues, than as a remedy in any true sense of the word. At the present time there are many good authorities on therapeutics who do not hesitate to say that iron acts, not by supplying the place of the lacking hemoglobin, but rather by its stimulating effect on digestive and absorptive processes in the intestines. There are even those who have insisted that the use of iron when it was actually absorbed in any considerable amounts brought about a degeneration, or at least degenerative appearances in the red blood corpuscles, not unlike those which are seen in certain phases of lead poisoning.

Of the advantage of the employment of iron in certain cases there can be no doubt. This has been recog-

nized by clinical experience, even when it is administered in very crude forms. There are country people still alive who remember when their fathers went to the village store, bought half a pound of shingle nails and a quart of vinegar, and having allowed the nails to remain in the vinegar for some time, gave the resulting solution containing some acetate of iron to their anemic wives, or more especially chlorotic daughters, and thought they obtained good results. In the midst of the present discussion of organic preparations of iron as the only possible iron compounds that can do good, and to the application of the most delicate tests in order to show that iron compounds can possibly be efficient in the human economy, this old-fashioned form of iron therapy must seem woefully crude, yet it would seem that it was often wonderfully effective. On the other hand, it must not be forgotten that one of the most distinguished English clinical authorities of modern times, Sir Andrew Clark, insisted that chlorotic forms of anemia particularly were due to constipation more than to anything else, and could be very successfully treated by proper attention to this symptom rather than by the direct treatment of the lack of hemoglobin.

THE EXAMINATION OF SCHOOL CHILDREN'S EYES AND EARS.

Since the publication of Beer's treatise on "Healthy and Weak Eyes" in 1800, in which many useful and important hints are given to teachers regarding the preservation of the sight of their pupils, physicians have appealed to the public conscience for a regular examination of school children. It is not, therefore, due to a lack of knowledge that these defects in our otherwise admirable public-school system have received so little attention, but because, until quite recently, there has been no systematic and sustained effort to introduce some simple, effective and practical means of detecting ocular and aural diseases that is capable of ready application by the teachers themselves. Appeals for the proper care of children's eyes and ears have borne better fruit in continental countries—especially in north Germany—than in the United States, chiefly because a paternal form of government seems more fit for the promulgation of widespread reforms of this character than does our own, where the work has to be carried on mostly by private enterprise or by agitations repeated in and for each state. However, the labors of such pioneers as Dr. Peter Callan (who in New York thirty years ago demonstrated the existence of eye defects in a large percentage of school children), of H. Derby, Mittendorf, Randall, Risley, Cohn and others, have served as a basis for a ready method of examination which has already been adopted by many school boards.

In a paper read this month before the International Congress of School Hygiene at Nuremberg, Professor Cohn of Breslau called attention to this subject, and referred to the fact that forty years ago he inspected the Breslau school children, which is perhaps the first systematic work done in this line. Until then school hygiene had hardly been thought of. From 1864 to 1866 he examined the eyes of over ten thousand children in search of the cause of the then recognized increasing short sight.

From his investigation he concluded that the number of shortsighted children steadily increases with the development of the school, from the lowest infant department through the high school, that myopia increases from class to class; in other words, that it is produced by school life. His experience during the past ten years has also proven to him that the acuity of vision in young children in the open air is two or three times greater than that of children in the school room. He has for years advocated the appointment of ophthalmologists for the examination of school children, and although much has been done in this regard, the number of shortsighted students has not diminished.

In 1895 Dr. Frank Allport, in a paper on "Refraction in Schools,"[1] advocated a plan for instructing teachers how to examine pupils above the first grade for the detection of eye defects. Later he added simple tests for aural affections, and finally perfected a scheme whereby instructions for the examination of school children's eyes and ears, for the use of principals and teachers, are combined with a vision chart. Provided with these ready means of examination even a novice may establish (or disprove) a probable disease of a pupil's eye or ear in a few minutes.

Briefly described, the apparatus consists of a Snellen test chart, appropriately mounted, with directions for the examination of the vision of each eye separately. This reading test shows the amount of defect, if any, in the pupil's eyesight. Then follow nine "facts to be ascertained,"[2] which throw further light on the subject, and serve to detect the more important diseases of the eye, nose and throat.

The plan has already received wide acceptance. Many state societies, among which are those of Michigan, Delaware, Minnesota, Colorado and New York, have adopted resolutions and appointed committees on the subject. The state boards of education of Texas, Kansas and Minnesota have approved the scheme and have put it

1. THE JOURNAL A. M. A., March 2, 1895.

2. These are: 1. Does the pupil habitually suffer from inflamed lids or eyes? 2. Does the pupil fail to read a majority of the letters in the number XX (20) line of the Snellen test types, with either eye? 3. Do the eyes and head habitually grow weary and painful after study? 4. Does the pupil appear to be "cross-eyed"? 5. Does the pupil complain of earache in either ear? 6. Does matter (pus) or a foul odor proceed from either ear? 7. Does the pupil fail to hear an ordinary voice at twenty feet in a quiet room? Each ear should be tested by having the pupil hold his hand over first one ear and then the other. The pupil should close his eyes during the test. 8. Is the pupil frequently subject to "colds in the head" and discharge from the nose and throat? 9. Is the pupil a habitual "mouth breather"?

If an affirmative answer is found to any of these questions the pupil is given a printed card of warning to be handed to the parent. These cards are non-obligatory in their nature. They do not require anything of the parent, who is at perfect liberty to take notice of the warning card or not, as he sees fit. If the parent neglects the warning it is repeated.

in practical operation, as have the state boards of health of North Dakota, Illinois, Montana, New York, Indiana, Connecticut (where it is operative under a state law), Minnesota, Kansas, Colorado and Ohio. The American Public Health Association, as well as the Conference of State and Provincial Boards of Health of North America, has also recommended its general adoption. It may also be added that the government schools of India have recently adopted this plan of examination.

We would suggest to those state societies that are yet to meet this year and to all county societies to take up this subject, and not only pass resolutions, but also appoint committees to make the work more effective, uniform and general throughout the country. A uniform plan for the examination of pupils' eyes that can be used by teachers should be adopted after thorough consideration. If the scheme referred to above is not satisfactory, another and better one should be devised. This is really a work that belongs to state medicine as much as to ophthalmology, and consequently a committee representing both the Section on Ophthalmology and the Section on Hygiene and Sanitary Science, would seem to be advisable, the functions of this committee being not only to formulate a perfect plan, but also to enter into correspondence with the state superintendents of schools and others interested relative to having the plan adopted all over the country.

If experience should demonstrate that the plan of having teachers examine the eyes of their pupils does not prove satisfactory, then we should adopt the motto of Cohn, "Keine Schule ohne Augenarzt."

CLINICAL DIAGNOSIS OF LESIONS OF THE PANCREAS.

The importance of the pancreatic functions in the maintenance of health is now universally recognized, and in consequence, the pathologic conditions affecting the gland are being more thoroughly investigated and their clinical effects more keenly studied and appreciated. The symposium on "The Pancreas and Pancreatic Diseases," at the last Congress of American Physicians and Surgeons,[1] epitomized the general knowledge of the subject, and if little addition was made to its extent the more glaring defects were strikingly emphasized. It was demonstrated that various abnormal conditions affecting the ducts and the parenchyma of the pancreas were usually productive of rather indefinite signs and symptoms, and which were, moreover, frequently difficult of differentiation from those resulting from pathologic processes involving neighboring structures. Certain lesions (e. g., acute pancreatitis, chronic obstruction of the common bile and pancreatic ducts) usually give positive indications for the institution of procedures that will almost certainly lead ultimately to the proper diagnosis and treatment, but there are many conditions that do not give these indications, and in which the proper treatment is of but little if any less consequence, so that any feasible and accurate diagnostic aid in the determination of the presence and nature of pancreatic lesions would be of the greatest value. Particularly is this true since it has been conclusively demonstrated that some operations, although performed for the relief of other conditions, have proved to be so beneficial to certain not uncommon pancreatic lesions.

The recent reports of Mayo Robson[2] and Cammidge[3] record the discovery of an apparently accurate and fairly simple clinical test capable not only of indicating the existence of a pancreatic lesion, but also, in a way, of determining its nature. Mr. Robson's reputation carries conviction that the method is worthy of general adoption. It has been fully described in THE JOURNAL.[4]

Cammidge's experiments, as reported, seem to exclude the possibility of error or of faulty interpretation of the results. Both are to be congratulated on so important a contribution to clinical methods, especially Mr. Cammidge for the able deduction of the chemical reaction. Whether this may prove to be as efficient in the hands of other laboratory workers, remains to be demonstrated. There is no apparent reason why it should not, and with the large amount of material to be found in hospitals, there should be widespread investigation, and, let us hope, confirmation of such valuable and important observations.

1. Transactions of the Congress of American Physicians and Surgeons, vol. vi, 1903.

THE GERMAN YELLOW-FEVER EXPEDITION.

We recently referred in our news columns to the fact that not long ago the Institute for Ship and Tropical Diseases in Hamburg sent a fully equipped expedition to South America to study yellow fever in particular. The results already obtained by American, English and French observers will now be subjected to thorough tests, and further reports from the expedition will be awaited with much interest. We see in expeditions of this kind the strongest evidence of the great interest now felt in tropical diseases and hygiene. This movement seems to date back only a few years. The epochal discoveries of Patrick Manson and Ronald Ross were followed by the establishment in Liverpool of a school for tropical medicine by means of funds contributed by wide-awake and philanthropic business men. This school has sent out several investigative expeditions, the results of which have been important in the fight against malaria, and more recently in clearing up the etiology of sleeping sickness. In addition, this school gives courses in tropical medicine. Other seaports have followed the example of Liverpool, and similar institutions have been started in London, Hamburg, Bordeaux and elsewhere for teaching and research, location in seaport towns being necessary in order to gain access to the proper clinical material. The German expedition,

2. Hunterian Lectures, March 7, 9, 11, 1904, Lancet, March 19-26, April 2, 1904.
3. Arris and Gale Lecture, Lancet, March 19, 1904.
4. THE JOURNAL, April 9, 1904, p. 982.

which also is to study and report on sanitary conditions in South American harbors, is supported financially by the merchants of Hamburg. Whether viewed from the philanthropic or commercial point of view, the study of tropical diseases and maritime sanitation is so important that we can only rejoice because it is fast becoming a matter of international competition. It may not be out of order to ask what is being done in this field in the great seaports of the United States, in addition to guarding against the importation of infectious diseases. So far as we know there is now no place in America where a physician may receive special instruction of the proper kind in tropical diseases and allied subjects. We look for the establishment of an institution of this kind in Manila before long, but it is quite evident that there is room and need for one or more such institutes in the United States proper.

SANITARY IMPROVEMENT IN SLEEPING CARS.

It is announced in the lay papers that the Pullman company has adopted a new design for sleeping cars, which is intended to more nearly meet the sanitary requirements. There will be no elaborate grill work, and the surfaces will be curved as far as possible. Material has been selected for the curtains and seat coverings which can be easily cleaned and disinfected. It is also stated that orders have been issued for more thorough disinfection of cars in which sick persons have traveled. Nothing more unsanitary in a case of infectious disease can well be imagined than the present upholstering of the Pullman railway cars, and the reform is one that certainly will be indorsed by the medical profession. The cars will gain the favor of the traveling public also, although much plainer in appearance and less luxurious than the older ones. It is hoped that the disinfecting and cleaning methods which are claimed to be practiced by the company will be thoroughly carried out.

REASONS FOR THE DECREASED BIRTH RATE.

A sociologic student, Mr. Robert Hunter, in a recent issue of the Chicago *Commons*, adopts the view that the decrease in the birth rate of the native American population is only the result of a universal law which was pointed out years ago by Farr, an English student of vital statistics. That authority observed that while emigration increases the birth rate of a country, immigration to a country almost invariably decreases its native birth rate, and at the same time increases the birth rate of the newly arrived immigrants. According to Gen. F. A. Walker, formerly superintendent of the Federal Census, this has been notably demonstrated in this country. In Mr. Hunter's opinion, immigration has not increased the population any more than would have been the natural increase had there been no immigration whatever. But by reducing the native birth rate it has prevented the propagation of a uniform and valuable stock to an extent that we all at the present time think to be undesirable. Of course, statements like these are not based on actual figures, or if so, the data are limited and have many lacunæ; still, such speculations have a certain probability, and there are other reasons why the truth of the theory should be accepted. These we need not here discuss. We have simply stated the explanation given of the reduced native birth rate, as a suggestion for thought.

EPIDEMIOLOGY OF PARATYPHOID FEVER.

Fischer describes in a recent article[1] an epidemic of paratyphoid fever which occurred in Kiel, affecting more than eighty persons, and which is especially interesting because of its probable origin. Without going into details, suffice it to say that on account of the distribution of the cases, it was relatively an easy matter to exclude water supply, milk supply and the character of the soil from having had any rôle in the spread of this epidemic. In one single house occurred nine cases (in practically all cases the diagnosis was established on the basis of the usual typhoidal symptoms of mild type—only one death—and by carefully controlled agglutination tests). In this house lived a butcher who had his shop in it, and these facts directed attention to the possibility that meat might have played some rôle in the spread of the disease. Inquiry brought the information that with five exceptions the families in which paratyphoid occurred were customers of this butcher. The exceptional cases Fischer would explain as the result of contact infection. He also points out that in an ordinary butcher shop conditions exist that in every way favor the secondary contamination of healthy meat by meat from an infected animal or infected in other ways. In this way he believes that the Kiel epidemic receives an explanation, which in every way harmonizes with all the facts in the case. Paratyphoid bacilli are more than usually resistant to heat. Thus heating for 30 m. to 60 degrees C. did not destroy the bacilli isolated from the cases in this epidemic. Even 5 m. to 75 degrees C. did not destroy all the bacilli. This resistance would serve to explain how imperfectly cooked infected meat, especially sausage, may spread this disease. While the evidence in Fischer's paper is not conclusive as to the nature of this epidemic, yet the facts brought forward are highly suggestive and instructive. It serves to focus attention on the butcher shop as a possible starting point of epidemics of typhoid-like diseases.

THE BRAIN AND SPINAL CORD IN HEREDITARY ATAXIA.

Some of the important clinical features of hereditary ataxia are summarized as follows by Sanger Brown:

> Hereditary ataxia is a disease which may be traced through several—at least four—generations, increasing in extent and intensity as it descends, tending to occur earlier in life and to advance more rapidly. It usually attacks several members of the same family. It occurs most frequently between the ages of sixteen and thirty-five, but it may begin as early as eleven and as late as forty-two. It shows no marked preference for sex, but it descends through females four times as frequently as through males. . . . There is always considerable inco-ordination of all the voluntary muscles, and a sluggishness of the movements they produce, when the disease is well advanced. This is usually noticed first in the muscles of the legs, but in a few months or years it extends. . . .

1. Festschrift zum sechsigsten Geburtstage von Robert Koch, 1903, p. 271.

The anatomic changes in a disease so peculiar as this, with such remarkable hereditary tendencies, naturally arouse great interest. We now have recorded by Barker[1] full description of the brains and cords of two brothers (in the family studied by Sanger Brown) dead of this disease, and the following are some of the most important changes: In both cases the brains and cords were relatively small. Microscopically degenerations were found in gray and white matter of cord, medulla and cerebellum. The degeneration involved the cells and fibers of certain centripetal paths (dorsal nuclears of Clarke, direct cerebellar tract of Flechsig into the restiform body, and a system of exogenous fibers corresponding to the third fetal system of Trepinski, dental nucleus of cerebellum, inferior olivary nucleus of medulla oblongata). One other case of this same family has been studied histologically by Adolph Meyer with, in general, identical results. These reports make it clear that the morbid changes in the members affected in the family described by Sanger Brown, are quite constant, the same neuron systems being involved, but the next question, namely, why are these special systems picked out, medical science as yet can give no answer. The special reasons for referring to this subject in this way are, first, to call the attention of those especially interested to Barker's report, and, second, to emphasize the great value of co-operation to the end that rare and valuable material of this kind may be utilized to the fullest possible extent. The physician in the country and small town without facilities and time for the prolonged work necessary in order to do justice to much material that naturally comes his way, nevertheless may further directly the progress of medical science in this country by securing the co-operation in such cases of investigators with the force and equipment of well-organized laboratories behind them.

1. The decennial publications of the University of Chicago, 1903, x.

Medical News.

CALIFORNIA.

Siskiyou County to Have Hospital.—The supervisors of Siskiyou County have let the contract for a hospital to be erected at Yreka, at an expense of about $10,000.

Personal.—Dr. Rosa H. Engert, formerly of Chicago, was seriously injured in a street-car accident at Santa Barbara, April 10, sustaining a fracture of the skull.——Dr. Frederick T. Bond, has been elected secretary of the Vallejo Board of Health, and health officer.

Health Board Needs More Money.—The San Francisco Board of Health asks for an appropriation exceeding by more than $100,000 that of last year. The chief items of increase are: Emergency Hospital, $9,760; Leper Hospital, $590; Smallpox Hospital, $2,800; Almshouse, $7,100, and City and County Hospital, $60,750.

COLORADO.

March Deaths.—The total deaths for March numbered 837, equivalent to an annual death rate of 17.12 per 1,000. There were 24 deaths from diphtheria, 12 from typhoid fever, and 9 from scarlet fever.

New Home for Dependent Children.—The State Home for Dependent Children has just moved into its new buildings, erected at a cost of $60,000, at University Park, Denver. Admission to the home is made through the district courts, and the state becomes sole guardian. There are now 145 children in the institution.

Contagious Diseases.—The following cases of contagious disease were reported to the State Board of Health during March: Diphtheria, 148; scarlet fever, 128; smallpox, 78, and typhoid fever 39. Compared with February, March showed an increase of 63 cases of diphtheria, and a decrease of 3 cases of scarlet fever, 107 cases of smallpox, and 10 cases of typhoid fever.

DISTRICT OF COLUMBIA.

Physician is Military Secretary.—The President has signed the bill making Brigadier-General Frederick C. Ainsworth, M.D., military secretary, under the new law, with the rank of major general.

New Naval Hospital.—Surgeon-General Rixey has just returned from an inspection tour, the purpose of which was the location of a new naval hospital. He recommends that it be located at Charleston, S. C.

New Morgue Completed.—The new morgue building erected for the District of Columbia and located on the water front, has been completed by the contractors and is ready to be accepted by the district commissioners.

For Increase of Army Medical Corps.—Surgeon-General O'Reilly and Major Jefferson R. Kean recently appeared before the committee on military affairs of the house and urged the passage of the bill which provides for the increase in the medical corps of the Army, commensurate with the size of the army required by law.

Health of the District.—The report of the health office for the past week shows the total number of deaths to have been 111, of which 70 were white and 41 colored. There were 94 births, of which 73 were white and 21 colored. At the close of the week there were under treatment 9 cases of diphtheria, 27 of scarlet fever, and 52 of typhoid fever.

ILLINOIS.

Scarlet Fever in Evanston.—Evanston has 17 cases of scarlet fever under quarantine at present, most of the patients being children who attend the Dewey school.

Fake Doctors Fined.—"Drs." Wallace and Ferguson, itinerants, arrested at Pekin for practicing medicine without a license, pleaded guilty, April 11, and were each fined $100.

School for Feeble-Minded Children.—Beverly Farm Home and School for Nervous and Backward Children, Godfrey, has just completed a brick school and gymnasium building, which will greatly increase the resources of this institution and makes it more effective for good work.

Doctors as Delegates.—B. E. Garrison of Wayne County reports the names of physicians selected as delegates to the state Republican convention, from his county, as follows: Drs. Thomas J. Hilliard, Jeffersonville, Dr. G. A. McDonald, Golden Gate, and Dr. Barney E. Garrison, Wayne City.

Personal.—Capt. Carlton E. Starrett, Elgin, assistant surgeon, Ill. N. G., has been made major and surgeon, and assigned to the Third Infantry, vice Dr. Henry Richings, Rockford, promoted.——Dr. Dorwin D. Barr, Weldon, is ill with smallpox.——Dr. and Mrs. Elbert E. Clark and wife, Danville, have sailed for Europe.

Chicago.

Rejects Inspection Plan.—The school management committee of the Board of Education has rejected the plan of Trustee Hartung for a more rigid examination of school children.

Addition to Home Treasury.—As a result of the "Living Whist" game at the Auditorium, April 18, the Home for Convalescent Women and Children has added $2,000 to its treasury.

Pneumonia Mortality Still High.—The pneumonia mortality has already broken all April records. During the first 23 days of the month 403 deaths were reported—a daily average of 22.1. The April daily average for the previous fourteen years had been 12.4. For the current month the daily deaths from pneumonia have been 78 per cent. higher than usual.

College Elects Directors and Officers.—At a recent meeting of the stockholders of the Chicago Eye, Ear, Nose and Throat College the following directors were elected: Drs. William A. Fisher, Adolphus G. Wippern, H. W. Woodruff, Thomas Faith and John R. Hoffman. The directors thereupon elected Dr. William A. Fisher, president and treasurer; Dr. Adolphus G. Wippern, vice-president, and Dr. John R. Hoffman, secretary.

Males and Aged Die.—Of the total 643 deaths for the week ended April 23, nearly 58 per cent. were of males and 42 per cent. of females—the excess of the former being due, among other causes, to their greater exposure, and 24 per cent. of the deaths were among those over sixty years of age, whose vitality

has been reduced by long confinement in over-heated and poorly ventilated rooms. The mortality was equivalent to an annual death rate of 17.37 per 1,000. Pneumonia leads with 141 deaths, or nearly 22 per cent., then follow consumption with 75, heart disease with 57, Bright's disease with 54 and violence with 39.

IOWA.

Smallpox.—Seymour is said to be suffering from an epidemic. Public schools have been closed and 25 houses are under strict quarantine.

College Life Ends.—The sixty-third annual commencement exercises of the Keokuk Medical College were held, April 19, when 45 graduates received diplomas. Dr. William B. LaForce delivered the doctorate address.

Personal.—Dr. Joseph A. Valenta has been re-elected health officer of Iowa City.——Dr. Rastus B. Raessler, Anthon, was seriously injured in a runaway accident.——Dr. Adelaide L. Ainsworth, Fort Dodge, is seriously ill with typhoid fever.

Medical Library Association.—At a meeting of physicians of Council Bluffs a medical and library association was formed, with a view to the installment of a medical reference library in the new Carnegie library building. Dr. F. W. Dean was elected president.

MARYLAND.

Baltimore.

Injured in Runaway.—Dr. Hiram Woods was seriously injured internally by a runaway accident, April 22, in Druid Hill Park.

Student Kills Himself.—Mr. Ernest Money, a medical student of Baltimore Medical College, committed suicide by inhaling illuminating gas, April 21. His body was found in the bath tub. It is said it was due to despondency from fear of being unable to pass the Maryland State Examining Board.

Society Meeting.—The Medical and Chirurgical Faculty met for its 106th annual session, April 26, 27 and 28. The first evening was devoted to the adoption of the new constitution prepared by the committee, of which Dr. H. O. Reik was chairman. The antitoxins and the Röntgen rays were discussed. Clinics were held at the various hospitals. The president, Dr. Eugene F. Cordell, delivered an address on "The Importance of the Study of the History of Medicine," and Dr. John B. Deaver of Philadelphia delivered the annual oration entitled "The More Remote Consequences of Infected Bile." Dr. C. C. Bombaugh read a poem on "The Foes of the Household." On the last evening a banquet was given at the Hotel Stafford, Dr. R. W. Johnson being toastmaster.

MASSACHUSETTS.

Visiting Nurses in Cambridge.—Cambridge has organized a visiting nurses' association, and will raise a fund of $5,000, to be used for the salary of their nurses for the first year, and for fitting up a home for them. A house has already been secured.

Home for Cripples.—The Massachusetts Committee on Public Charitable Institutions has reported a bill providing for the appointment of a commission of three who shall expend $300,000 for the purchase of land and erection of buildings for a school and home for crippled and deformed persons.

Heavy Expense for Insane.—The report of the trustees of the Boston Insane Hospital shows that under the new state law, the expense of Boston for its insane poor will be largely increased. Formerly this expense amounted to $625,000 a year. This next year it will foot up $737,200. Under the new law the state assumes the care of all the insane, paying Boston $3.25 per week for the 900 now cared for in the Boston Insane Hospital, and leaving that institution in the care of its present trustees. The state tax, however, is very largely increased, amounting to $1,870,000 this year, and of this Boston must pay 36 per cent.

MICHIGAN.

Their Silver Wedding.—On April 23, Dr. and Mrs. Charles S. Cope, Ionia, celebrated the twenty-fifth anniversary of their marriage.

Senior Student Drowned.—M. J. Tinker, a senior student at the University of Michigan Medical Department, was drowned by the capsizing of a boat, April 20.

Radium Water and Sensational News.—A member of the faculty of the Medical Department of the University of Michigan asks us to publish the following notice, which it has been found necessary to have printed to send to those who have been deceived by the sensational newspaper items concerning the use of radium water. The notice is as follows: "The authorities of the University do not hold themselves responsible for the reports in circulation in the public press concerning the use of 'radium water,' so-called, in the treatment of cancer; and hereby notify patients not to come here in the expectation of receiving such treatment."

NEW YORK.

The epidemic of typhoid fever at Watertown is now completely under control. Since January 1 there have been 600 cases, of which 44 have proved fatal.

Smallpox.—During 1903 Jamestown had a limited epidemic of smallpox, with 174 cases, but without a death.——Many new cases of smallpox have been reported to the department of health of Buffalo.

To Allow Felons to Resume Practice.—A bill has been introduced to amend the act in relation to the qualifications of a person who may practice medicine. The law at present states that no person shall practice medicine who has ever been convicted of a felony by any court. The amendment reads: "But where the felony for which the person was convicted was not committed in the performance of his professional duties, and a pardon by the governor has been granted, such person may thereafter resume practice."

New York City.

Bellevue Interns Contract Phthisis.—Several physicians on the staff have been stricken with tuberculosis since the first of the year as a result of overwork and strain because of the overcrowded condition of this institution.

Health Fund Deficit.—Owing to the unusual prevalence of contagious diseases the health department has incurred a debt of $258,878, and Dr. Thomas Darlington has asked the board of estimate and apportionment to raise this amount by bond issue for immediate use.

Money Needed for Hospitals.—The collections fell off this year owing largely to a stormy Hospital Sunday, about $8,000, and the fund is about $4,000 short. The distributing committee has appealed for aid in making up this loss, as the city hospitals have never stood in greater need.

Dr. Morton's Widow Dies.—On April 21, Mrs. W. T. G. Morton, widow of the physician whose work with the anesthetic properties of ether brought it into prominence, died at her home in this city, from pneumonia, aged 79. An article by Dr. Morton appeared in THE JOURNAL, April 23, on the early use of ether.

Personal.—Dr. Edward L. Keyes, Sr., sailed, April 23, for Europe. He will join Dr. Lewis A. Stimson and they will take a two or three months' yachting trip along the Mediterranean. ——Dr. and Mrs. Charles T. Poore sailed for Europe, April 23, on the *Zeeland*.——Dr. Patrick H. Fitzbugh sailed for Europe, April 23, on the *Pretoria*.

Campaign Against Mosquitoes.—The board of health has opened its spring war against mosquitoes by issuing a statement requesting physicians to notify the departmentt of all cases of malarial fever which come under their observation; the surrounding locality will then be searched for breeding places and measures taken to kill the larvæ.

County Association Election.—At a meeting of New York County Medical Association, April 18, the following officers were elected for the ensuing year: President, Dr. Francis J. Quinlan; vice-presidents, Drs. Henry A. Dodin and S. Busby Allen; secretary, Dr. William R. Stone; corresponding secretary, Dr. John J. Nutt, and treasurer, Dr. Charles E. Denison.

Contagious Diseases.—For the week ended April 16, 1,416 cases of measles were reported, with 34 deaths; 481 cases of pulmonary tuberculosis, with 210 deaths, 466 cases of scarlet fever, with 28 deaths; 73 cases of varicella; 18 cases of whooping cough, with 8 deaths; 415 cases of diphtheria, with 56 deaths, and 16 cases of typhoid fever, with 6 deaths; there were also 410 deaths from pneumonia.

Physician Sues Estate.—An attempt to collect a check for $10,000 against the estate of an Albany millionaire by Dr. Harris Moak of Brooklyn is being tried before the Supreme Court. While a student he was employed as nurse and masseur to the deceased. About ten days after receiving a check, his patient died, and fourteen months later Dr. Moak presented this check to the executor, who alleged that it was void and fraudulent.

New Bellevue Hospital.—The designs for the new Bellevue Hospital have been made public. They call for a building which, exclusive of land, will cost $11,000,000, which will cover

three city blocks and will be the largest hospital in the world, not only in floor space, but in the number of patients it will accommodate. The plans provide for thirteen pavilions under one roof, but connected by arcades. There will be roof gardens for convalescents, and a water-cure department equipped with all modern apparatus for the hydropathic treatment of disease. There will be spacious quarters for 100 doctors, 100 male nurses, 200 women employes, and 350 male employes. The five upper floors of the south wing will contain medical wards, the limit of each ward being 25 patients. The five upper floors of the north wing will contain surgical wards. The surgical amphitheater will be equipped with 10 operating rooms, all within easy access to the various wards and complete in every detail. Beside the approval of the trustees of Bellevue and Allied hospitals and the board of estimate the plans will have to be submitted to the State Board of Charities, where, it is expected, considerable opposition will be encountered.

OHIO.

Personal.—Dr. and Mrs. William H. Manning, Dayton, have returned from a trip to Mexico and the south.——Dr. Hugo Maetke, Dayton, has returned after a stay of two years in Europe.——Dr. Charles W. King has been re-appointed health officer of Dayton.

Assistant Physicians Meet.—The third annual meeting of the Association of Assistant Physicians of the Ohio State Hospitals was held at Gallipolis April 6 and 7. Dr. William H. Pritchard, Gallipolis, was elected president, Dr. Paul W. Tappan, Dayton, vice-president; Dr. Walter H. Buhlig, Gallipolis, secretary, and Dr. F. Day Ferneau, Toledo, treasurer.

Exclusion of Eddyites Held Unconstitutional.—In the Common Pleas Court, Sandusky, April 18, this afternoon, Judge Reed ruled that the state medical law is unconstitutional because it limits the right to practice without the use of drugs or medicines to osteopaths, and by the rule of exclusion Eddyites are prohibited. He said it should be amended to allow for a reasonable examination of Chrisitian Scientists and for their registration.

PENNSYLVANIA.

Paralyzed.—Dr. Julius A. Stricker, Portage, was stricken with paralysis, April 17, and is still seriously ill.

Bequest.—By the will of Dr. Cyrus R. Stuckslager, McKeesport, $5,000 is bequeathed to the McKeesport Hospital.

Health Board Appointments.—Dr. Louis P. McCormick, president, Connellsville; Dr. Calvin F. McDowell, city physician, Newcastle; Dr. W. Knowles Evans, vice-president, and Dr. Franklin J. Evans, city physician, Chester.

Go to Another Hospital.—Drs. J. Purd Kerr, of the gynecological and surgical staff, and Charles H. Hertzog, of the surgical staff of the South Side Hospital, Pittsburg, have resigned to become members of the staff of St. Joseph's Hospital, which is to open May 1.

Graduate Nurses to Fight Impostors.—The Graduate Nurses' Association met in session in Wilkesbarre, April 20, to frame legislation compelling the registration of all graduate nurses in order to protect the public against impostors. An effort will be made to have the necessary legislation passed at the next meeting of the legislature; committees were appointed for that purpose.

Philadelphia.

Bequests.—By the will of the late George Huster the following institutions have been benefited: St. Mary's Hospital, St. Joseph's Hospital, and St. Vincent's Home and Maternity Hospital, $1,000 each.

Cancer Annex Fund.—The managers of the Philadelphia Home for Incurables have not appealed in vain for funds to erect a new cancer annex. Within two months they have received donations amounting to $22,000, varying in amount from $1 to $10,000.

Inspection of Abattoirs.—At the last executive session of the health board, rules and regulations were drafted for a thorough sanitary inspection of slaughter houses, abattoirs and butcher shops. This step was taken as a result of the recent work of the medical inspectors, who reported many of these places in a very unsanitary and filthy condition.

Exposure of Baby Farms.—The *Philadelphia Press* has been devoting special attention to the exposure of existing abuses due to lax legislation with reference to midwives, the registration of births, lying-in hospitals and baby farms. Much public sentiment has been aroused, and it is proposed that at the next meeting of the legislature a bill shall be presented adequately and fully to meet the needs of the city. Every effort will be made to secure the passage of the bill. For this purpose the *Press* has appointed a commission to draw up a statute covering these subjects. The commission is composed as follows: Drs. John G. Clark, Charles E. Cadwalader and Edward E. Montgomery; Mr. George Wharton Pepper, representing law, and Mary E. Richmond, secretary of the organization of charities.

Typhoid Unabated, Increase in Smallpox.—The epidemic of typhoid fever remains unabated, the total cases reported during the week being 352. This is seven less than last week. There were 14 deaths from the disease during the week, a decrease of 15 over the preceding week. That portion of the city supplied with filtered water remains particularly free from the malady. ——A fresh outbreak of smallpox has occurred. The new cases reported during the week numbered 32. This is an increase of 7 over last week's report. Nine deaths resulted from the disease, as compared with 5 reported for the preceding seven days. The cases reported are not confined to any particular section, but are scattered throughout the city. The general death rate still continues high, 594 deaths being reported. This is an increase of 24 over those of last week, and an increase of 74 over the corresponding period of last year. Two deaths were due to hydrophobia.

WISCONSIN.

Accident.—Dr. Helen A. Harbert, Kenosha, recently sustained severe internal injuries. An automobile collided with her buggy and she was thrown out.

Want Unisolated Isolation.—The Milwaukee Medical Society has adopted resolutions opposing the plan to remove the isolation hospital outside of the city limits.

Pneumonia.—During March, 74 of the 439 deaths in Milwaukee, or nearly 17 per cent. were due to pneumonia, a larger number and percentage than have ever before been recorded in the city.

Impugns State Board's Motives.—In a petition for a peremptory writ of mandamus filed April 16, the State Board of Medical Examiners is charged with conspiracy and with entering into an illegal and malicious agreement to refuse to recognize the Harvey Medical College of Chicago.

GENERAL.

Another Medical Daily Gives Up.—The *Daily Medical*, which was to revolutionize medical journalism in this country, has ceased to exist. This was the third medical daily to start, and to die, in the United States; evidently there is no great demand for such a publication.

FOREIGN.

Dental Hospital for School Children.—Strasburg has appropriated 980,000 to build a dental hospital for its school children.

Institute for Treating Hernia.—A "Bassini Institute" is planned at Milan to supply operative treatment of hernia to the poor. The subscriptions have now reached nearly $3,000.

Sale of Opium at Smyrna.—The *Riforma Medica* states that 520,000 kilograms of opium, more than a million pounds, are sold at Smyrna each year. A fourth of the entire amount is purchased for the European markets.

Unprecedented Meeting of the Paris Academy of Medicine.—After the official opening of the regular meeting of the Académie on April 12, it was found that there was absolutely nothing on the order of the day, and the solemn conclave adjourned.

Russian Physicians at the Seat of War.—Among those who have left for the far east we note the well-known names of Professors E. Masing jun. and Zoege von Manteuffel of Dorpat. An interesting series of letters from the former is being published in the *St. Petersburger med. Woch.*, written in German.

Shall a Physician Refer His Patients to Certain Pharmacists?—A medical society in Paris has recently been discussing this question, and concluded in favor of the view that it is the physician's right and even duty—under existing conditions—to tell his patients to have his prescriptions made up at certain pharmacies in preference to others.

Anniversaries Among Our German Confreres.—The fiftieth anniversary of the entrance on their professional career has recently been celebrated by Drs. H. A. Müller of Hamburg, A. Bode of Cassel and Salzer of Worms. We also note that the friends of Prof. W. Hittorf, the physicist who discovered the cathode rays, celebrated his eightieth birthday March 27.

Cooking for the Sick.—Vienna has opened a restaurant modeled on the successful ones in Germany, which are exclusively devoted to the task of supplying food to sick persons. They are semi-charitable undertakings and the physicians are finding them a great aid in the treatment of patients in poor or moderate circumstances. The meals are delivered at the homes, kept warm in thermophore dishes.

Professor Pozzi Coming to America.—The *Revue Médicale de Canada* states that it has learned that the University of Paris has appointed Professor Pozzi as its representative to the Congress of French-speaking Physicians, to be held at Montreal, June 28. Prof. S. J. Pozzi is the famous gynecologist, editor of the *Revue de Gynécologie*. He is now in his fifty-ninth year, and will receive a warm welcome from the profession in America.

Vaccination of the Kaiser's Children.—The report has been current in Germany that the children of the imperial family had never been submitted to vaccination. The official organ of the post-graduate courses asked permission to publish a statement from the Kaiser's physician, Dr. von Leuthold, in regard to the facts. The statement was officially made that the children had all been vaccinated strictly in accordance with the ordinances and revaccinated at the proper age.

Preservation of the Old Medical School in Paris as a Historical Relic.—The city council of Paris has yielded to the pressure brought to bear by the medical profession and has decreed that the most ancient part of the old faculté de médecine in the rue de la Bucherie shall be set apart as a historical monument. The property was bought by the city eight years ago for $60,000, but nothing has been done further to date. The building will need considerable restoration before it can be utilized as a museum and library, which is the present plan. Part of some of the buildings dates from 1369, and other parts from 1499.

Syphilization of Apes on Their Native Soil.—As the anthropoid apes almost inevitably succumb rapidly to tuberculosis when imported into Europe, a project has been formed to seek them in their native haunts to carry on the research in regard to their inoculation with syphilis. An expert bacteriologist will be sent to Borneo or Sumatra with facilities for the search for an efficient antitoxin serum against syphilis, utilizing these apes for the subjects if sufficient funds can be raised for the purpose. Metchnikoff of Paris and Lassar of Berlin are the moving spirits in the project. Each of them has had remarkable success, they think, in their inoculations of chimpansees, as duly chronicled in these columns in the last few months.

The Japanese Hospital Ships.—Japan ordered as long ago as the middle of the nineties two hospital ships to be built in England, and they have since been in readiness for a war. During peace times they are leased to a passenger and freight line, but were used for their special purposes during the campaign of 1900. They made then about fifteen trips from China to Japan, conveying nearly 3,000 wounded to the hospitals in Japan, including a number of men belonging to the European armies of occupation. Each vessel is about 300 feet long, we are informed, 40 feet wide, of 2,700 tonnage, and they are constructed so that they can be used in waters not exceeding 20 feet in depth. The upper deck is for the officers of the Red Cross Society, with saloons, bath rooms, etc. The middle deck is the hospital proper, and the lower deck for the male nurses, the store rooms, etc. Each ship has accommodations for 200 patients. Further details are given in the *British Medical Journal* for April 16, and in the *Caducée*, a French medical magazine.

The Russian Wounded.—The Russian Red Cross Society has provided supplies for 5,710 beds, in addition to the flying squadrons, the total being now 6,435. A fleet of boats is being prepared to serve as floating hospitals on the Amur and Ussuri rivers. Disinfecting battalions have also been organized. During the last war in the Far East the society spent over eight million dollars, but now has scarcely more than a third of this sum at its disposal. The nobility of twenty-five different "governments" has raised a fund of more than half a million dollars, and is applying it to the aid of the sick and wounded. The Moscow clinics have appropriated a hundred beds for the wounded returning from the war, the professors volunteering to personally defray the expense. The clinics and university of Tomsk, by imperial orders, are also being put in readiness for the reception of wounded. By the last week in March the Red Cross had despatched to the seat of war 744 persons—physicians, students, nurses and attendants, and 445 more are on the point of leaving or have gone since.

Correspondence.

The Composition of Some So-called Synthetics and "Ethical" Nostrums.

PHILADELPHIA, April 20, 1904.

To the Editor:—One of the noblest attributes of the character of an American is his desire for fair play; and one of the fundamental principles of American justice is that the accused party is considered innocent until proved guilty.

The comments published in the issue of April 16, 1904, under the above heading, insomuch as they refer to products of our manufacture, are not in accordance with the facts.

First, as to thermol, concerning which it is stated that this "wonderful new discovery is nothing but impure phenacetin." Would it not be more to the point to definitely state what that impurity is? and in what quantity? As to the explanation that "possibly traces of salicylic acid have been added to the product from time to time," that would lead one to think that salicylic acid had been added in a mechanical way merely for effect. We will state that perhaps some traces of salicylic acid may be detected from time to time, because in the process of crystallization some of the same may be split off from the original chemical compound, which is not unusual in any chemical of the kind. This same fact happened to Kraut when he crystallized his acetyl salicylic acid and led him astray on his melting point.

The chemist ascertains the composition of molecules by two methods: First, by analysis, which consists in separating the molecule into its constituent atoms. Second, by synthesis, which consists in putting together the constituent atoms to form the molecule.

Unfortunately, the chemist never lived who could make an analysis—a resolution of the whole into its first elements—of an aromatic compound of this class. Therefore, the only manner of truthfully ascertaining the composition of molecules of an aromatic compound of this character is by synthesis.

In making acetyl-salicyl-phenetidin we put the proper molecular proportions of acetic and salicylic acids into the autoclave with the phenetidin (60 pounds of salicylic acid to 59 of phenetidin) and when the chemical reaction is over we remove the newly formed chemical compound and proceed to purify the same. We first wash it with a thin soda solution to remove any uncombined acid, then we wash it with a solution of muriatic acid to remove any uncombined phenetidin. The first washing is afterward made acid with muriatic acid to recover what there is of any uncombined salicylic acid. The proportion that is recovered is but a mere trace of the total amount used, and this fact is proof positive that the salicylic acid has become part of that chemical compound. These facts we can most readily prove by the voluntary oaths of our workmen, and we can also show the signature of the most able chemist, Sadtler, to further substantiate them.

Why not let the owners of the phenacetin patent settle this matter for themselves in the United States Court?

Next, as to bismuth oxyiodid methylene digallate (named by us iodomuth), of which the article says, "according to analysis is merely bismuth gallate with a small quantity of free gallic acid; no iodin could be traced in the examined specimen." What methods were used to detect the iodin? What became of the formaldehyd that had been so firmly united to the gallic acid? Professor Sadtler demonstrated at the time when application was made for U. S. letters patent that it contained over 24 per cent. of iodin, and we can readily prove that we have never made a grain of this chemical since that demonstration except in exact accordance with the process there set forth.

Now, as to urasol, which is referred to as the "greatly boosted wonderful remedy"—acetyl-methylene-disalicylic acid—which this article says is an "impure methylene salicylic acid," that can be readily produced.

We do not deny that methylene *di*salicylic acid can be readily produced, after the idea has been created, but we do deny the ability of the critic to produce "methylene salicylic acid."

Again, as to impurity. What is this impurity? We make

and sell both the methylene disalicylic acid, and the acetyl methylene disalicylic acid. Which of the two was tested? There is a vast difference between them. Here, again, Professor Sadtler verified the correctness of our chemical by testing at the time of applying for patents.

Should the Heyburn Pure Food Bill become a law, it will not interfere in the least with the sale of our products in any state of our union.

Let us state in closing that this most evident partisanship is unfair. Why is not the purity of the products of our foreign competitors questioned? Perhaps they fear that the brains which produced the ideas that are responsible for these new chemicals, which have been abundantly confirmed by the United States Patent Office, might take away from them some of the profits that they have been reaping in the American market.

The able clinicians who study the physiologic actions of their remedies are able to learn the therapeutic efficiency of the same. Yours very respectfully,

S. LEWIS SUMMERS,
Organic Chemical Manufacturing Company.

Death and Blindness from Wood Alcohol.

CHICAGO, April 23, 1904.

To the Editor:—The following circular letter has been sent to members of the Section on Ophthalmology of the American Medical Association and to some other physicians who would be most likely to furnish the desired information. If any of your readers, who have not received the circular, will assist in the investigation, by sending a report of unpublished cases, it will be gratefully received and acknowledged:

In my judgment the time has arrived for placing preparations containing wood alcohol on the list of poisons. It would also, in my opinion, be appropriate if the initial steps were to proceed from the Section on Ophthalmology of the American Medical Association. As representative of that body in the House of Delegates I am gathering evidence to prove the toxicity of methylated preparations. A short account of which I propose to lay, first of all, before the Section, and then, by resolution, before the House itself. In that way pressure can be exerted on the various states in the hope of inducing appropriate legislative action.

Will you kindly assist in this work by sending me a short account of any unpublished case of death or blindness, personally known to you, that has followed the ingestion of wood alcohol? I especially desire particulars as to the form of the poison—whether taken as Columbian spirits, Jamaica ginger, essence of lemon or peppermint, colognе spirit, etc., or as ordinary beverages adulterated with methyl alcohol. The results of analyses of these preparations will be of especial value in this investigation.

Occasional descriptions of methyl-alcohol intoxication are published in the smaller general medical journals or mentioned only in the local press. Clippings from these sources would also be welcome.

103 Adams Street. CASEY A. WOOD.

Use of Ether at Battle of Wilderness.

BOSTON, April 23, 1904.

To the Editor:—I am sorry to see in THE JOURNAL of this date a "magazine written" article, mainly for the purpose of repeating the old falsity that W. T. G. Morton discovered and introduced ether anesthesia, when he himself at first acknowledged that Dr. C. T. Jackson gave him the prescription with directions, later given to Massachusetts General Hospital and by it given to the world. JACOB L. WILLIAMS, M.D.

MARSHALL, TEX., April 25, 1904.

To the Editor:—It would appear to one of your southern subscribers and a son of one of those "rebels" "who did not generally fire on those wearing the ambulance badges," that the article in THE JOURNAL, April 23, entitled "The First Use of Ether as an Anesthetic at the Battle of the Wilderness in the Civil War" is more of a laudatory article on the exceptional valor of the pension drawers than one of interest to medical men. What is said of ether would not occupy ten lines in the article, which is made up of heroic federal and vanquished rebel.

Believing THE JOURNAL to be non-partisan as much for the conquered rebel as for the victorious federal, I was surprised and grieved to find any such article in its pages.

CHARLES E. HEARTSILL, M.D.

Queries and Minor Notes.

THE SO-CALLED ABSORPTION TREATMENT OF CATARACT.

CONVERSE, IND., April 13, 1904.

To the Editor:—Is there any remedy that will remove the opacity of the lens in the condition commonly termed cataract? Is there anything in the so-called absorption or disintegration cure? There are thousands who fall into the hands of the so-called curist. Are any cures wrought from this manner of treatment, and if so, what is it? Some have come under my observation who have apparently been benefited, but would they not have been better without any medications? M. CATON KIMBALL.

ANSWER.—The ordinary forms of cataract are due to structural changes in the lens, whose fibers, previously as transparent as clear glass, are converted into an opaque substance comparable to ground glass. In rare instances, such as in the early stages of cataract from diabetes, the opacity in the lens may be due to exudates thrown out between the fibers, and not to actual destruction of the lenticular tissues. This form of cataract is a rare exception to the rule, and if the disease that gives rise to it progresses (as it commonly does) the crystalline fibers themselves are eventually destroyed and their place taken by opaque material, as in the senile or other common forms of cataract. Bearing in mind these facts one can readily understand how absurd is the "absorption" or any other "cure" of genuine cataract. Neither manipulation of the eyeball nor local applications, however mild or severe, will avail to restore the destroyed lens fibers. One might as well expect to "absorb" an organic lesion of the cardiac valves by rubbing liniment over the left breast. Apparent improvement or cure of cataract by these methods are mostly due (1) to the imagination of the patient, (2) to the fact that the dulled vision arose partly or altogether from a curable eye disease not situated in the lens (some corneal affection, for example), or (3) to the absorption of a diabetic deposit in the lens substance which underwent a partial or total absorption coincident with improvement in the systemic condition. In all these cases the improvement might occur with or without treatment. It must be remembered, also, that improvement in the vision of cataractous eyes sometimes takes place for a time if the local health of the ocular apparatus is improved by rest and soothing applications, or if the pupil be kept dilated by atropin or other mydriatics. Finally, there are such lenticular opacities as "stationary" cataracts; the disease progresses to a certain extent and then, without any particular reason, remains in *statu quo* for many years. Doubtless the "absorption cure" has often received credit for this form of "improvement."

COMMISSIONS.

RICHMOND, VA., April 21, 1904.

To the Editor:—A and B are members of one school and C is a member of another school, A and C being surgeons, while B is a general practitioner. Because A will not divide fees with B, the latter throws his surgical cases into the hands of C, who will divide. How about the ethics involved, and would the membership of B or C in the A. M. A. be affected under the circumstances? QUERY.

ANSWER.—Membership in the American Medical Association depends on membership in the county society, consequently the question with which our correspondent concludes is one that belongs to the county society. The Principles of Medical Ethics of the A. M. A. says: "It is derogatory to professional character for physicians to pay or offer to pay commissions to any person whatsoever who may recommend to them patients requiring general or special treatment or surgical operations. It is equally derogatory to professional character for physicians to solicit or to receive such commissions." (Sec. 4, Article 6, Chapter 2.) We answer with entire disregard of our correspondent's statement concerning "one school" and "another school."

ATAVISM IN THE NEGRO.

SALEM, MASS., April 24, 1904.

To the Editor:—I have been interested in the following discussion: Can an octoroon woman married to a pure white man give birth to a pure negro child, or one of darker skin than herself? May she give birth to a white child with all the facial characteristics of the negro? Is there such a thing as a prevert in a case of this character? Authorities seem to disagree and I was informed you might give me some information. H. A. C.

ANSWER.—Such reversions, we believe, are not only possible but probable as occasional occurrences. These reversions are likely not to be complete, but we could not say that such would be impossible. We are under the impression—this also without support of statistics—that they are more common with the white mother and hybrid father than when the reverse is the case.

PATIENT IS FREE TO CHOOSE PHYSICIAN—CONDUCT OF LOCUM TENENS.

T. O. sends these two queries: 1. A calls B in consultation or to give anesthetic. The family are favorably impressed by B. and when next they need a physician call in B. B takes the case. Is

this taking the case unfairly? If not, should B give any explanation of his conduct to A. 2. A leaves the city for a few weeks. He leaves word with certain patients that if they are ill in his absence to call in B. The patients are ill during A's absence and B is called in. On the return of A is B under any obligation to send the patients to A?

ANSWER.—1. B can not restrict the liberty of the patient to choose his physician and is not technically unethical in taking the case. He should not be active in the change and might well explain this to A. 2. B is practically a locum tenens for A and acts accordingly, turning over the case to A on his return. In each instance the application of the golden rule will solve the problem.

FORMULA FOR CANCER PASTE.

GRANVILLE, FLA., April 16, 1904.

To the Editor:—Kindly give me through THE JOURNAL the formula for Bongard's paste for epithelioma. A. E. CANTER.

ANSWER.—

R. Wheat flour and starch, of each	60 parts.
Arsenic	1 part.
Cinnabar and salammoniac, of each	5 parts.
Corrosive sublimate	½ part.
Col chlorid of zinc. sl. 52°	245 parts.

M. Grind the first six ingredients to a fine powder, then mix them in a mortar. Add the solution of zinc chlorid, stirring slowly. Keep in an earthen jar. Cocain may be added up to 20 per cent. to allay pain. Sig.: Apply accurately to the part; keep on for thirty hours; follow with a poultice.

SPECIALIST ON EVERYTHING—ANOTHER LETTER HEAD.

Our comment on a letter head last week has brought out another that is worthy of note. On it appears an illustration (3 by 4 inches) of a nebulizer. The wording is as follows:

OFFICE OF DR. —, —, ———.
PHYSICIAN and SURGEON.
Tel. ——, —. —— —, ——— St.
Specialist on Obstetrics, Diseases of Women, Diseases of Chest, Throat and Nose, Diseases of Stomach, Genito, Urinary and Intestinal Tract. Nervous, Surgical Diseases, Etc.

TURTLE SERUM.

A subscriber of St. Louis writes very indignantly regarding the letter on the above subject by Dr. Howle, of Charleston, Mo., published in this department two weeks ago. Our St. Louis correspondent thinks the letter an insult to our foreign scientific men and periodicals. He thinks that it was a sneer at rivals because they are of another nationality. We are very much afraid that hereafter we shall have to label the jokes that are allowed to appear, even though they are published for a good purpose.

NO RECIPROCITY BETWEEN ILLINOIS AND WASHINGTON.

DAVENPORT, IOWA, April 10, 1904.

To the Editor:—Please tell me through THE JOURNAL whether the state of Washington reciprocates with Illinois, and whether my certificate of the Illinois State Board of Health will permit me to practice in Washington without further examination by that board.

J. D. CRAWFORD.

ANSWER.—No.

A WORK ON CLIMATOLOGY.

DR. A. B. STEWART, Owatonna, Minn., answering a query in THE JOURNAL, March 19, 1904, recommends as a work on climatology the one by Dr. S. Edwin Solly, Denver, published by Lea Brothers & Co., Philadelphia and New York.

Deaths.

Israel Thorndike Dana, M.D. Harvard University Medical School, Boston, 1850, one of the founders of the Portland School for Medical Instruction; for a number of years professor of materia medica and theory and practice of medicine in the Medical School of Maine; one of the founders and sometime president of the Maine Medical Association, and of the Cumberland County Medical Society; and one of the founders of the Maine General Hospital, died at his home in Portland, April 13, after a long period of enfeeblement, aged 76.

Edward J. McGorrisk, M.D. Medical Department of St. Louis University, 1855, successively surgeon of the Seventeenth Iowa Volunteer Infantry brigade and division surgeon and medical director of the Fifteenth Army Corps in the Civil War, a pioneer practitioner of Des Moines, Iowa, sometime surgeon general of Iowa, died at his home in Des Moines, April 16, after a lingering illness, aged 69.

Charles Kerr, M.D. Rush Medical College, Chicago, 1865, during the Civil War assistant surgeon of the Fifty-ninth Illinois Volunteer Infantry; a member of the American Medical Association, representative in the state legislature in 1884, a resident of Springfield, Ill., since 1885, died at St. John's Hospital in that city, April 13, from cardiac asthma, after a long illness, aged 66.

Edward H. Lee, M.D. Royal College, Würzburg, Germany, 1892, staff surgeon at Cook County, Alexian Brothers and West Side hospitals, Chicago, was almost instantly killed by falling over the railing of a staircase at the Chicago Athletic Club, from the ninth floor to the rotunda, a distance of 125 feet, early on the morning of April 24, aged 36.

David L. Bailey, M.D. New York University, 1875, first president of the Carbondale (Pa.) Board of Health, and of the Emergency Hospital; a member of the Carbondale and Lackawanna County medical societies, died at his home in Carbondale, April 13, from septicemia due to an operation wound, after an illness of one week, aged 53.

Wilbur F. Nutten, M.D. College of Physicians and Surgeons, New York, 1863, member of the American Medical Association, New York State Medical Association and Wayne County Medical Society, one of the best-known practitioners of western New York, died suddenly from heart disease at his home in Newark, N. Y., April 19, aged 64.

Edwin L. Randall, M.D. Missouri Medical College, St. Louis, 1869, dean and professor of theory and practice of medicine in Knoxville Medical College; a member of the East Tennessee and Knox County medical societies, died from pneumonia at his home near Knoxville, Tenn., April 18, after an illness of two days, aged 50.

Oscar H. Huntley, M.D. Jefferson Medical College, Philadelphia, 1856, surgeon in the First Illinois Volunteer Cavalry in the Civil War, a member of the Bureau County Medical Society and the oldest practitioner in the county, died at his home in Buda, Ill., from pneumonia, April 18.

Josiah D. McVay, M.D. College of Physicians and Surgeons, Keokuk, Iowa, 1873, member of the Iowa House of Representatives in 1883, and state senator from 1887 to 1891, died suddenly from heart disease at his home in Lake City, Iowa, April 10.

John W. Adams, M.D. Beaumont Hospital Medical College, St. Louis, 1887, professor of physical diagnosis in the St. Louis College of Physicians and Surgeons, died from heart disease at his home in St. Louis, April 9, aged 39.

Ignatz Friedmann, M.D. University of Budapest, Austria, 1866, of Cleveland, a member of the American Medical Association, was killed in that city, April 21, as the result of a collision between his carriage and a street car.

Abner Alexander, M.D. Baltimore Medical College, 1877, of Columbia, N. C., repeatedly representative from Tyrrell County in the General Assembly, died in Johns Hopkins Hospital, Baltimore, April 9, aged 65.

William T. Beach, M.D. Jefferson Medical College, Philadelphia, 1863, for many years secretary of the Schuylkill County Medical Society, died at his home in Minersville, Pa., April 8, after a long illness, aged 64.

Benson Knox, M.D. Arkansas University, Little Rock, 1886, several times president of the Hill County (Texas) Medical and Surgical Association, died at his home near Woodbury, April 15, aged 65.

C. Norton Mourning, M.D. Hospital College of Medicine, Louisville, 1900, assistant to the chair of abdominal surgery in that institution, was found dead at his home in Louisville, April 16.

Henry Polk Robson, M.D. Birmingham (Ala.) Medical College, 1902, of Snow Hill, Ala., was run over and killed while attempting to board a freight train at Wallace, Ala., April 13.

Lorenzo J. Kohnstamm, M.D. New York University, 1889, died from general paresis at the Manhattan State Hospital for the Insane, April 18, after an illness of four years, aged 42.

Charles M. Nodler, M.D. Keokuk Medical College, College of Physicians and Surgeons, Keokuk, Iowa, 1902, died at his home in Denver from tuberculosis, after a long illness, aged 44.

Deaths Abroad.

Sir Henry Thompson, Bart., F.R.C.S. England, 1853; M.B. London, 1851, the eminent surgeon, teacher and writer, died at his home in London, April 18, aged 83. He was a fellow of the Royal Medico-Chirurgical Society and Royal Medical Society of London; a member of the Pathological and Harveian societies,

and an honorary member of many foreign societies. He was made professor of pathology and surgery in the Royal College of Surgeons in 1884, and was president of the Cremation Society since its organization in 1874. His most famous work was in the pathology and surgery of the prostate, bladder and urinary passages.

Samuel Smiles, M.D., Edinburgh, LL.D., made famous by his series of perseverance works, "Self-Help," "Thrift," "Character," "Duty," "Invention and Industry," and "Conduct," also a journalist and secretary of the Leeds and Thirsk and afterwards of the Southeastern Railway Company, died April 16 at his house in Kensington, London, after a long illness, aged 91. He was known as the apostle of perseverance, for perhaps no book of modern times has taught so admirably what may be accomplished by continued effort as has his volume "Self-Help."

I. Rosenthal, M.D., professor of physiology at Erlangen, and author of many papers on animal heat, calorimetry, electrophysiology, etc., died recently. His last work was a book on "Instruction in Physiology," dealing especially with its importance in the education of medical students. He advocated the use of physiology as a discipline to educate the logical powers of the student.

A. de Martino, M.D., a prominent figure in Italian medical and political life, long professor of obstetrics at Naples and family physician to the reigning family, died at Naples, February 29, aged 84.

The Public Service.

Army Changes.

Memorandum of changes of station and duties of medical officers, U. S. Army, week ending April 23, 1904:

Pipes, Henry F., and Bingham, E. G., asst.-surgeons, on arrival at San Francisco, en route to Manila, P. I., commanding general, Department of California, authorized to assign them to duty with troops going from Presidio of San Francisco to Yosemite and Sequoia National Park, Cal., for duty during season of 1904, then to proceed to Manila, P. I.

Rutherford, Henry H., asst.-surgeon, granted thirty days' sick leave of absence.

McAndrew, F. H., asst.-surgeon, leave of absence extended fifteen days.

Waterhouse, Sam'l M., and Edger, Benj. F., Jr., asst.-surgeons, ordered to report in person to Lieut.-Col. Geo. H. Torney, deputy surgeon general, president examining board, Presidio of San Francisco, for examination for promotion.

De Witt, Wallace, asst.-surgeon, granted seven days' leave of absence.

Banta, Wm. P., asst.-surgeon, on relief from duty at target range, Leon Springs, Texas, to proceed to Kerrville, Texas, for duty at the artillery camp at that place.

Wells, Francis M., contract surgeon, has received an extension of two months to his leave of absence from the Division of the Philippines.

Tigner, Edwin P., contract dental surgeon, left Fort Mackenzie, Wyo., April 15, for Fort Riley, Kan., his proper station, arriving on the 17th.

Reddy, Joseph, contract surgeon, granted two months' leave of absence from the Philippines Division.

Shallenberger, James E., contract surgeon, left Fort Ringgold, Texas, April 17, for his new station, Fort Sam Houston, Texas, and has been ordered thence to duty at the target range, Leon Springs, Texas.

Navy Changes.

Changes in the medical corps, U. S. Navy, for the week ending April 23, 1904:

Stone, E. P., surgeon, detached from the *Mayflower* and ordered to the Naval Academy.

Pryor, J. C., P. A. surgeon, ordered to the Naval Hospital, Newport, R. I.

Holcomb, R. C., P. A. surgeon, detached from the Naval Hospital, Newport, R. I., and ordered to the *Mayflower*.

Strite, C. E., A. A. surgeon, appointed A. A. surgeon from April 13, 1904.

Lowndes, C. H. T., surgeon, detached from the Naval Academy and ordered to the *Chesapeake*.

De Valin, C. M., P. A. surgeon, detached from the *Rainbow* and ordered to the *Albany*.

Traynor, J. P., asst.-surgeon, detached from the *Albany* and ordered to the *Rainbow*.

Arnold, W. W., surgeon, retired from active service April 19, 1904.

Marine-Hospital Service.

Official list of the changes of station and duties of commissioned and non commissioned officers of the Public Health and Marine-Hospital Service, for the seven days ended April 21, 1904:

Brown, B. W., P. A. surgeon, granted leave of absence for two days from April 25.

Blue, Rupert, P. A. surgeon, granted leave of absence for three days from April 19.

Greene, J. R., P. A. surgeon, relieved from duty at Havana, Cuba, and directed to report to the medical officer in command at New York (Stapleton) for duty and assignment to quarters.

Holt, J. M., asst.-surgeon, to report to medical officer in command at San Francisco, for duty and assignment to quarters.

McLaughlin, A. J., asst.-surgeon, granted leave of absence for four days from April 20.

Warren, B. S., asst.-surgeon, granted extension of leave of absence for one day from April 17.

Ashford, F. A., asst.-surgeon, leave of absence for ten days from March 28, 1904, amended so that said leave shall be for eleven days.

Altree, G. H., A. A. surgeon, granted leave of absence for five days from April 19.

Bailey, C. W., A. A. surgeon, granted leave of absence for eleven days from April 22.

Duke, B. F., A. A. surgeon, granted leave of absence for eight days from April 18.

Marsh, W. H., A. A. surgeon, granted leave of absence for five days from April 26.

Moncure, J. A., A. A. surgeon, Department letter of March 31, 1904, granting leave of absence for thirty days from April 10, 1904, amended so as to read thirty days from April 12.

Iltis, G. W., pharmacist, granted leave of absence for twenty-five days from May 3.

Medical Organization.

Illinois.

KNOX COUNTY MEDICAL SOCIETY.—At the fifth semi-annual meeting, held at Galesburg, April 19, the society adopted the standard constitution and by-laws, reorganized, and elected the following officers: President, Dr. Alexander F. Stewart, Oneida; vice-president, Dr. Lawrence R. Ryan, Galesburg; secretary-treasurer, Dr. George S. Bower, Galesburg; censors, Drs. Louis Becker, Knoxville; William O'R. Bradley, Galesburg, and Charles F. Bradway, Abingdon, and Dr. Lawrence R. Ryan, Galesburg, delegate to the state society.

Iowa.

MEDICAL ASSOCIATION OF CLINTON COUNTY.—This association was organized at Clinton, April 13. A temporary organization was first effected, with Dr. Joseph C. Langan, chairman, and Dr. Harry R. Reynolds, secretary. The standard constitution and by-laws was adopted, after which permanent officers were elected as follows: Dr. George A. Smith, president; Dr. Herbert R. Sugg, vice-president; Dr. E. L. Martindale, secretary and treasurer; Dr. John H. F. Sugg, delegate to Iowa State Medical Society; Dr. Christian Jonsson, alternate, and Drs. George Hofstetter, Joseph K. Milbourne and Robert E. Everhart, censors, all of Clinton.

Kansas.

ALLEN COUNTY MEDICAL SOCIETY.—The physicians of the county met in Iola, April 13, and organized a medical society on the standard plan with 17 members and the following officers: President, Dr. Paul S. Mitchell, Iola; vice-presidents, Drs. James E. Jewell, Moran, and Joseph H. Hindman, Humboldt; secretary and treasurer, Dr. John W. Bolton, Iola, and censors, Drs. William R. Heylman, Iola, Charles W. Rennick, Gas, and Harry V. Dresbach, Iola.

Maryland.

BALTIMORE CITY MEDICAL SOCIETY.—The Baltimore Branch of the Medical and Chirurgical Faculty of Maryland, under the new organization, met, April 15, and organized on the standard plan with the following officers: President, Dr. Harry Friedenwald; vice-president, Dr. Isaac E. Atkinson; secretary, Dr. John Ruhrah; treasurer, Dr. Thomas A. Ashby; censors, Drs. John I. Pennington, Henry B. Thomas and James M. H. Rowland; delegates to medical and chirurgical faculty, Drs. William S. Thayer, Samuel T. Earle, John S. Fulton, Robert S. Reik, John D. Blake, Charles O'Donovan, Herbert Harlan, William S. Gardner, and C. Urban Smith.

Mississippi.

HINDS COUNTY MEDICAL SOCIETY.—The physicians of the county met at Jackson, April 15, and organized a county medical society with the following officers: Dr. Thomas M. Price, Raymond, president; Dr. Archibald McCallum, Edwards, vice-president, and Dr. Osborn M. Turner, Jackson, secretary-treasurer.

West Virginia.

BARBOUR, TUCKER AND RANDOLPH COUNTY MEDICAL SOCIETY.—The medical society of Barbour, Tucker, and Randolph counties was organized recently at Elkins, with 30 members and the following officers: President, Dr. J. Calvin Irons, Elkins; vice-presidents, Drs. S. D. Few, Parsons, and D. W. Brown, Bellington; secretary, Dr. Frank B. Murphy, Philippi; treasurer, Dr. E. H. Stump, Philippi, censors, Drs. Irwin Hardy, Davis, O. L. Perry, Junior, and Humboldt Yokum, Beverly.

Wisconsin.

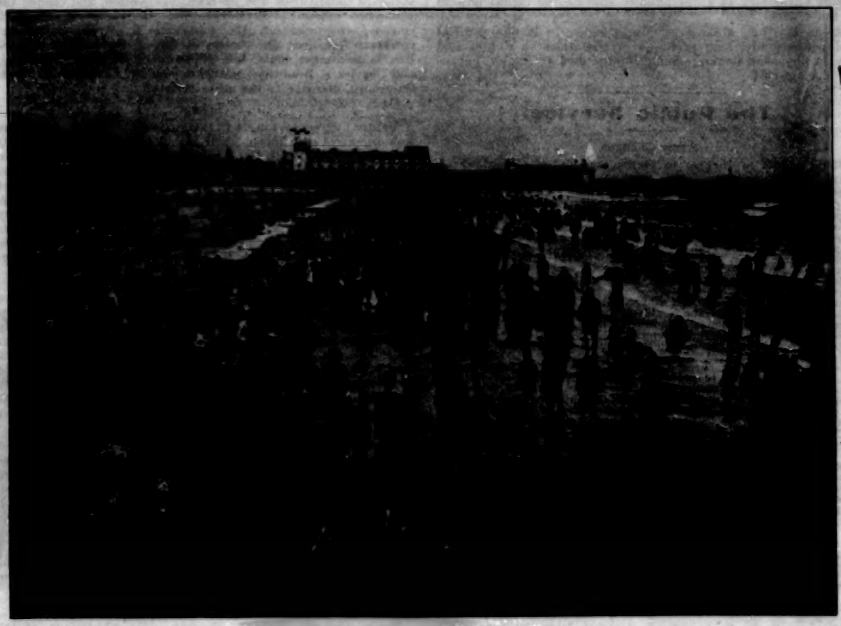
TENTH DISTRICT MEDICAL SOCIETY.—The physicians of the tenth congressional district recently met at Rhinelander and organized a district medical society, of which Dr. Ignatius D. Steffen, Antigo, was elected president, and Dr. Thomas J. Hambley, Hurley, secretary and treasurer.

THE ATLANTIC CITY SESSION

American Medical Association, Fifty-Fifth Annual Session, Atlantic City, New Jersey, June 7 to 10, 1904

THE GREATEST RESORT IN AMERICA—THE SCENE OF THE 1904 SESSION.

A few years ago an eminent physician, after spending four years in traveling through all parts of the United States, and in visiting numerous resorts for health, publicly expressed the opinion that Atlantic City was destined to become "the greatest, most popular and most widely known resort on the American Continent—perhaps in the world." That prophecy to-day is fulfilled. With a permanent population of 35,000, it stands apart, in a class of its own, distinct from the ordinary summer settlement. With a midsummer population verging on 250,000, it boasts itself to be the largest city on the Atlantic coast south of New York. With its present rate of growth and popularity as a resort for health and pleasure in every month of the year, it will in the near future attain such proportions as now it might seem extravagant to predict. And perhaps the most confidence-inspiring feature of the whole case is that all this vast development is on the sure and certain basis of actual and demonstrated worth. Atlantic City deserves to be the great resort it is and the greater resort it will be. That is the fact on which its hope is based, and of the soundness of which every appreciative visitor is speedily convinced.



Midsummer Bathing Scene; Steel Pier in the Distance.

THE LENTEN SEASON.

After all that can be said of Atlantic City as a summer resort, its most charming social feature is during Lent. It is then that the fashionable hotels and boarding houses are thronged with the wealthy people, who seek seclusion and rest during the penitential season. The fashionable come from their giddy round of social pleasures, the professional men and women from their studies, the merchant from his perplexing ledger, the politician from his nagging constituents, and youth and beauty to see and be seen of each other. It is the sea-

son of quiet, but is not devoid of pleasure. There are dainty musicales, readings and recitals almost nightly in the hotels. The great cosmopolitan throngs have not yet invaded the hotels, quiet dignity prevails and the hotel colony takes on much of the appearance of a family reunion. It is a season when lasting friendships, not petty flirtations, obtain; when the effervescence is missing, and the solid, tangible side of life is in evidence.

A YEAR-ROUND HEALTH RESORT.

The visitor at this season need dread no discomfort, but rather look forward to all the comforts of home, doubly magnified. The rooms will be steam heated and electric lighted. He may bathe in salt sea water with the winter chill extracted, may read or dream before a glowing open-grate parlor fire, wander through tropical-like conservatories or bask in warm sunshine, and from behind the clear glass inclosures of the sun parlors watch the ocean in its moments of anger or placidity. He may breakfast, lunch and dine on the finest that the land affords, and, in short, live like a prince, with naught to annoy and everything to please and entertain.

Many of the more recent visitors to Atlantic City do not know that although the history of the place as a pleasure resort dates from the time of its founding in 1854, exactly fifty years ago, it was not until more than twenty years later that it became known as a health resort and sanitarium. To-day there is no northern winter resort so popular and none so urgently recommended by physicians as Atlantic City.

The fame of the resort is grounded not alone on those qualities which have established its pre-eminence as a summer resort, nor on those which give it prominence as a winter resort. It is a health resort, as well as a great seaside city, where, throughout the year, people from every state crowd its hotels and lounge on its famous Boardwalk.

Several elements combine to produce the tonic and resting effects of the Atlantic City air, chief of which is the presence of a large amount of ozone—the stimulating, vitalizing principle of the atmosphere. Ozone is a tonic—it strengthens the respiratory organs and helps the whole system. It follows naturally that the circulation is improved, tone is given to the stomach, the liver is excited into healthful action and the whole body feels the benefit.

For the man or woman who is brain-weary and breaking down under the weight of business, professional, social or domestic cares, there is no better restorative than a season of rest and recreation at Atlantic City. With increased bodily vigor comes the gentle ministration of tired Nature's sweet restorer. This is a sure sign that the nerves are being well rested.

Persons who could scarcely walk at home, after a few days' stay in Atlantic City, stroll long distances on the strand or Boardwalk, with only a cheerful sense of weariness that is soon succeeded by a sharpened appetite, the reward of agreeable exercise. Few, indeed, who visit this resort fail to experience a marked improvement in appetite.

Brighton Casino. Meeting Place for Section on Nervous and Mental Diseases.

THE HOTELS.

No city in the world has as many well-appointed ho-

tels, in proportion to the population, as this great seaside resort. Beside the large number of first-class hotels, there are many more of the second class, and hundreds more of desirable boarding houses, where the rates are such as to astonish those who are accustomed to the extortionate charges at other resorts. Of these hotels and boarding houses—700 in all—too much can not be said. They range from the rivals of the finest in the world to the quiet, home-like boarding houses found in every large city. In point of equipment and inviting comfort they are unexcelled, and being almost without number, they stand to satisfy the vagaries of every applicant. Altogether, they will accommodate not less

RATES PER DAY ON AMERICAN PLAN.

Bouvier	$1.50	and up.	
Roxborough	1.50	to	$2.50
Revere	2.00	to	2.50
Altamont Craig Hall	2.00	to	3.00
Archdale	2.00	and up.	
Belmont	2.00	and up.	
Berkshire Inn	2.00	to	3.00
Chester Inn	2.00	to	2.50
Dunlop, $2.00 to $3.00, European exclusively.			
Young's Hotel, $2.00 to $3.00, European exclusively.			
New Hygeia	2.00	to	3.00
Albemarle	2.00	to	3.50
Arlington	2.00	to	3.50
Holmhurst	2.00	to	4.00
Champlain	2.00	to	4.00
Kenilworth Inn	2.00	to	4.00
Hotel Majestic	2.00	to	4.00
Hotel Boeccbel	2.00	to	6.00
Chatham	2.50	to	3.00
Glaslyn	2.50	to	3.00

Young's Ocean Pier. General Headquarters for Bureau of Registration, General Sessions and Scientific Exhibit. Meeting Place for Section on Diseases of Children.

than 200,000 visitors. The Committee on Hotels makes the following report:

A LIST OF HOTELS AND PRICES.

Out of the many hotels the committee has selected the following, which they can recommend. Comfortable board may be obtained in Atlantic City from $1 per day upward. The minimum rates apply to single rooms without baths, while the per capita rate per day for double rooms in most cases can be slightly reduced when two occupy the same room. For those wishing accommodations on the European plan, the Dunlop and Young's Hotel are exclusively European; the Grand Atlantic, the Wiltshire, the Garden, the Islesworth, and the Rudolf. The prices given below cover the American plan, except those furnishing accommodations on either European or American plans, referring to the Dunlop and Young's Hotel.

Hotel New England	$2.50	to	$3.00
Ponce de Leon	2.50		
Wiltshire (also European)	2.50	and up.	
Hotel Imperial	2.50	to	3.50
Hotel Shoreham	2.50	to	3.50
Loraine	2.50	to	3.50
Rittenhouse	2.50	to	4.00
Grand Atlantic (also European)	2.50	to	3.00
Raleigh	3.00		
Hotel Gladstone	3.00	to	5.00
Hotel Savoy	3.00	to	5.00
Hotel Strand	3.00	to	5.00
Haddon Hall	3.00	to	7.00
Islesworth (also European)	3.00	to	8.00
Shelburne	3.00	to	8.00
Seaside	3.50	to	4.00
Rudolf (also European)	3.50	to	5.00
Garden	3.50	to	6.00
Hotel Dennis	3.50	to	6.00
Royal Palace	3.50	to	6.50
Hotel Windsor	3.50	to	7.00

Hotel Chelsea	$4.00	and	up.
St. Charles	4.00	and	up.
Hotel Traymore	4.00	to	$8.00
Hotel Brighton	4.00	to	10.00
Marlborough House	4.00	to	10.00

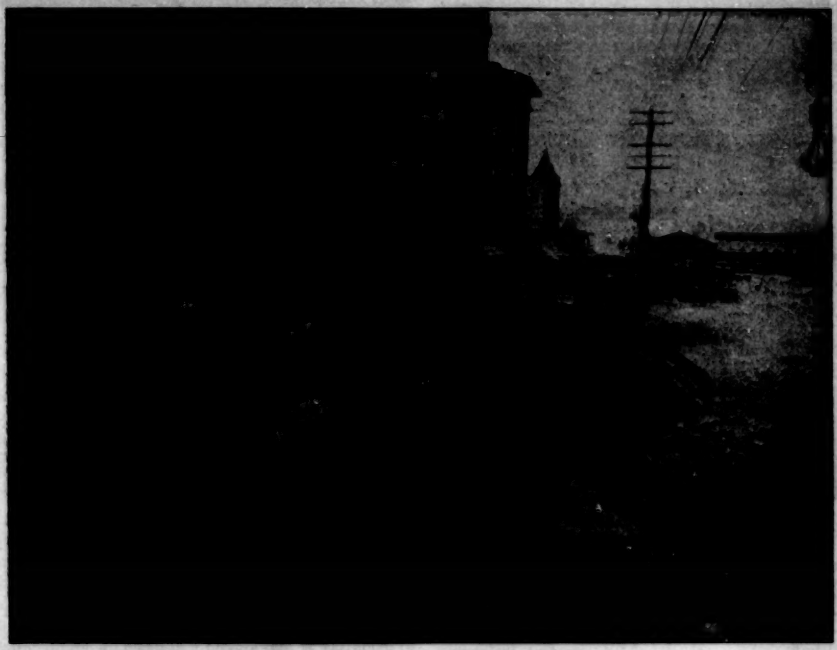
In order to get good accommodations, engagements for rooms should be made without delay. The committee will be glad to furnish any information desired, and will be pleased to engage quarters at the various hotels, or physicians may write to the hotel direct.

WM. EDGAR DARNALL,
Chairman Hotel Committee.

The rolling chairs for invalids and well people who are averse to walking on the Boardwalk, are a great convenience to the thousands of hotel guests. The elevators in the hotels start from the ground floor, and invalids may be wheeled in from the street to the elevator, thence to an upper balcony or to the bedroom, without leaving the chair.

Atlantic City is not a watering place in the sense that the term generally applies. It is, as has been stated, a seaside city, with a permanent population of about 35,000, and more than $75,000,000 of taxable property. All of the advantages of a well-organized municipality are offered, with the added attractions of a perfect health and pleasure resort. Well-paved streets, beautiful residences, a very efficient fire department and police force, over a score of churches, including all denominations, ample telegraph and telephone systems and connections, several steamship lines to adjoining resorts and other features might be mentioned as evidence of the attractions of the city.

In point of accessibility, Atlantic City possesses advantages unequaled by any other resort in America. It is connected with Philadelphia and with all the railroads centering there by numerous through trains, which make the run in sixty minutes, while with New York and the East there is ample communication by through trains, which make the run from New York to Atlantic City in three hours. From the West and South, passengers are conveyed via Philadelphia, across the Delaware River bridge, without change of cars.



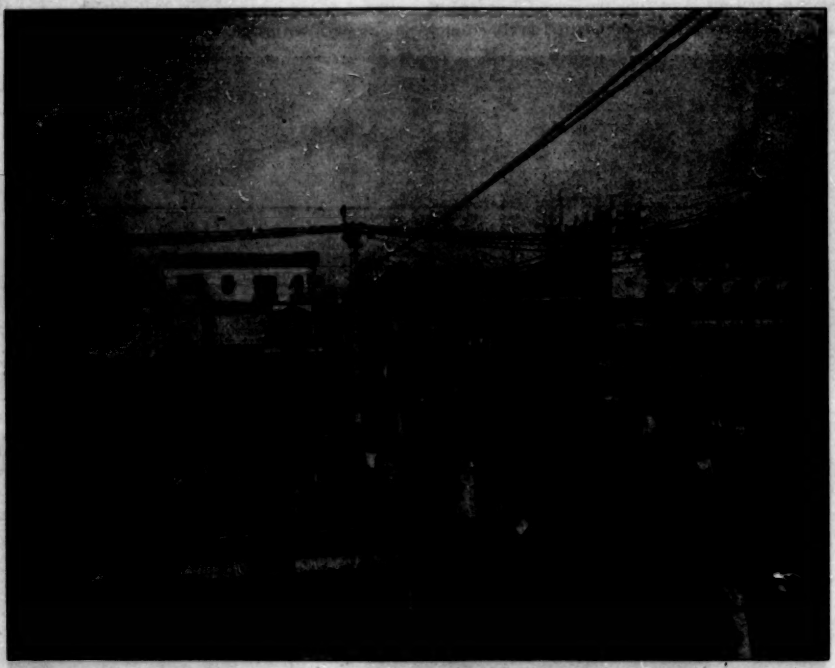
Showing the Easter Visitors (Easter Sunday, 1904).

Atlantic City long since learned how best to provide for the health and pleasure seeker, and it is now the business of the resort to set forth its varied attractions, which are all in the direction of making one's stay delightful. Hard to amuse, indeed, would be the visitor who could not find some congenial diversion ever close at hand, every day in the week and every week in the year. Atlantic City, indeed, is the nation's playground, its public park, its place of perennial pleasure. In the charms of novelty and ever-shifting variety it surpasses any other city in the East, the West, the North, or the South.

FISHING AND BOATING.

The water attractions of Atlantic City are unique. A fleet of yachts, unexcelled anywhere in the country, furnish sailing on the ocean's billows, calm and peaceful at times, and at other times as rough and as boisterous as one could wish; or, if one perfers, he can glide over the smooth waters of the bays and inlets, without the slightest danger of seasickness. Then there is the deep-sea fishing "outside," or what is more inviting to some, the sport of catching sea bass and weak fish "inside."

here attains a popularity unknown to more northern resorts. The near approach of the Gulf Stream to this point increases the temperature of the water to a delightful degree, and takes from it the bitter chill from which so many would-be bathers shrink. At the fashionable hours of bathing, from 11 to 1, the beach is crowded with thousands of merry bathers, whose shouts and laughter mingle with the roar of the surf. The bathing is superb, especially after the summer's sun has warmed the ocean to suit those who are averse to the first cold dip in springtime. The bathing is as safe here as



Showing Steel Pier in the distance. Steeple-chase Pier in the foreground.

THE GOLF LINKS.

One of the crowning features of Atlantic City's environs is the magnificent home of the Country Club, with its elegant golf grounds. The links have eighteen holes, overlooking Lake's Bay, and are in close proximity with a five-mile-wide meadow, where game is plentiful. In the picturesque distance the ocean and variegated horizon make a glorious silhouette to the east, while the western wildwood and evergreen pines give the surroundings a most delightful appearance.

BATHING.

The pleasures of the surf bath bring multitudes to Atlantic City during the summer months, and bathing

anywhere in the world, and considering the many, many thousands who bathe annually, the drownings are very few.

Bathing at Atlantic City begins earlier and continues longer than at any other seaside resort along the eastern coast of the United States. The bathing beach—which is backed by the Boardwalk with its crowd of interested spectators—will accommodate a million people in comfort; some lying on the sand or strolling about; some wading in the shallows, and others swimming out boldly in the depths. This remarkable stretch of sand is free from stones or gravel, and is as nearly perfect as any bathing resort.

THE FAMOUS BOARDWALK.

The Boardwalk is the greatest promenade of its kind in the world; it is solidly built of steel and is forty feet wide. Bounded by a strong iron fence, it reaches from one end of the city front to the other, and will accommodate at one time more than a million persons without unpleasant crowding. The prominent hotels are situated close to it and are entered from it, while innumerable stores, bazaars, restaurants, curio shops, picture galleries and every sort of place of amusement that ingenuity can devise, make a kaleidoscopic picture that is seldom equaled.

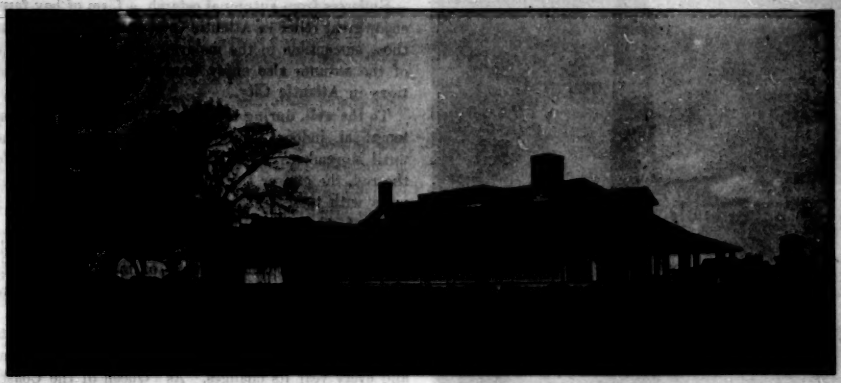
The life, the light and the color that one sees on this promenade are indescribable. It is an endless dress parade—a grand review—in which everybody is one of the reviewers, as well as one of the reviewed. The animation, the overflowing good nature, the laughter and contagious hilarity of this restless throng are irresistible. The lights from the scores of bazaars, the buoyant merriment of the children, the soft, melting colors of the summer dresses of the women, the freshened loveliness of the women themselves, and the thousand and one little scraps of life and tone that line the thoroughfare, all blend in a picture that is warranted to banquet the eye and rest the mind of anyone who is not utterly lost to every sense of enjoyment.

Nowhere in the world is there such a kaleidoscope of beauty, such a panorama of wonders, as one sees on this great ocean promenade. An annual visitor said: "I have been to every prominent seaside resort and spa in Europe, and I know whereof I speak when I say that nowhere is there a resort that can in any way approach Atlantic City. In addition to the unusual opportunities for enjoyment, it is unquestionably the healthiest place in America."

From this Boardwalk there extend out into the sea several piers, on which are pavilions and theaters. All day long something is happening here for the enjoyment of the thousands of visitors. Concerts of high excellence are given by bands of music, and amusements of varied sorts are taking place in profusion. One of these piers is a steel pier, which extends 2,800 feet into the ocean.

THE PLACES OF MEETING.

Some of the sessions of the American Medical Association will be held in the Marine Hall, an immense auditorium on this steel pier directly over the ocean. Delegates, while considering the important matters pertaining to the convention, and hearing what others have to say, may also listen to what the wild waves are saying the whole day long, meantime inhaling life-giving ozone at every breath. Young's pier is a short distance away, and in its immense shore-end pavilion are to be located the meeting places of several sections, as well as the Registration Bureau, the Scientific Exhibit and the Drug and Instrument Exhibit. A list of the various meeting places follows:



Atlantic City Country Club at Northfield. May be reached by trolley.

MEETING PLACES.

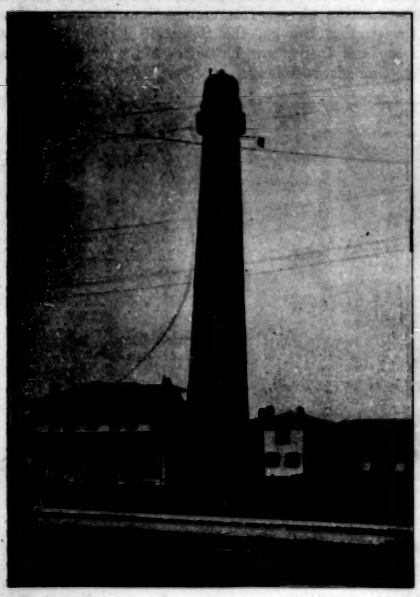
General Sessions	Young's Pier.
Registration Bureau	Young's Pier.
Practice of Medicine	Young's Pier.
Scientific Exhibit	Young's Pier.
Diseases of Children	Young's Pier.
Surgery and Anatomy	Steel Pier.
Ophthalmology	Steel Pier.
Obstetrics and Diseases of Women	Steel Pier.
Laryngology and Otology	Steel Pier.
Hygiene and Sanitary Science	Garden Hotel.
Stomatology	Islesworth Hotel.
Nervous and Mental Disease	Brighton Casino.
Cutaneous Medicine and Surgery	Shelburne Hotel.
Materia Medica, Pharmacy and Therapeutics	Young's Hotel.
Pathology and Physiology	Green's Hotel.
House of Delegates	High School.

HEADQUARTERS OF THE SECTION OFFICERS.

The following hotels are the general headquarters of the various sections. The Marlborough House is the general headquarters of the American Medical Association:

Practice of Medicine	Traymore and Gooden.
Obstetrics and Diseases of Women	St. Charles.
Surgery and Anatomy	Haddon Hall and Islesworth.
Hygiene and Sanitary Science	Gooden.
Ophthalmology	Seaside.
Diseases of Children	Dennis.
Stomatology	Islesworth
Nervous and Mental Diseases	Brighton.
Cutaneous Medicine and Surgery	Shelburne.
Laryngology and Otology	Strand.
Materia Medica, Pharmacy and Therapeutics	Young's.
Pathology and Physiology	Windsor.

It must not be supposed that all the enjoyment, all the recreation, all the benefits of a visit to Atlantic City are confined to the summer months. The witching charms of autumn sea and sky hold many a summer visitor even until the ides of November. Indeed, not a few linger until December, and ere the holiday festivities are fairly over at home, the first company of winter visitors has arrived, harbingers of that larger company whose appearance marks the advent of February.



The Absecon Light.

The "season" in Atlantic City, the reader will infer, continues throughout the year. The perennial visitor finds here, forsooth, an ever-changing but never-ending season. The resort's response to Spring's passionate wooing is a simple invitation to "come." In the springtime, particularly in March and April, the devotees of Dame Fashion, banishing all desire for social pleasure at home, hasten to Atlantic City to enjoy new pleasures and new life amid old friends and old scenes.

In summer time the joys of other days are forgotten. Life, animation and happiness go hand in hand, and pleasures abound on every side. The spell is irresistible; the charm contagious.

When mellow autumn comes and the year puts on her visionary tints, Atlantic City again bids you "come." The air is pregnant with health and the breezes are a tonic to mind and body. It is even said that the sunshine of October intoxicates with excessive healthfulness. At this season there is a tranquillity unknown to summer visitors. The sea of human faces has ebbed, and there is relief in the absence of the surging, ever-changing crowds of summer time.

Sun parlors, pavilions, rolling chairs and carriage drives along the glittering strand or over the stone roads —these and other pastimes appeal to the easy-going, pleasure-loving visitors. The bathing in September and October is delightful, and the fishing, crabbing and boating are at their best.

Sufferers from autumnal catarrh, a form of hay fever, enjoy great relief in Atlantic City. Delicate people and those susceptible to the malarial and typhoid influence of the autumn also enjoy immunity from these affections in Atlantic City.

To the well, during the fall months, there is little attempt at indoor pleasure in daytime—at least not until November. Even the card tables are deserted for the rod, the gun or the sail, and those who are not experts with these traverse the beach and Boardwalk in quest of other forms of pleasure.

In the heart of winter social life plays a great rôle. The amusements consist chiefly of musicales, theatricals, dances, receptions, card parties, readings, lectures and a round of gayeties at the hotels and cottages.

Thus the days, the seasons and the years come and go. Every day has its pleasures, every season its charms and every year its changes. As "Queen of the Coast," Atlantic City worthily wears her crown.

Nowhere else in America is there such magnitude of relaxation. Day after day, from early morn to midnight, it presents itself along that riparian plaisance, the Boardwalk. Nowhere else do the social extremes come nearer to touching each other without friction or unpleasant lines of demarcation.

The "season" at Atlantic City, as we have seen, does not end with the close of the Lenten and post-Lenten pastimes, nor with the recession of the summer procession. In truth, the "season" at Atlantic City, as has been stated, never ends. The year begins with the midwinter season, which imperceptibly blends into the Lenten season, which blossoms into the brilliant Easter season, which runs on to the regular spring season, which is a prelude to the midsummer season, which is followed by the late summer and early fall season, which gives way to the regular autumn season, which brings us to the holiday season, which makes both ends meet by linking on to the midwinter season.

OTHER MEETINGS AT ATLANTIC CITY.

As is customary, several of the specialists' societies are to meet in Atlantic City just before or just after the session of the American Medical Association. These are mentioned in another column in the list of "Coming Meetings," under the heading of "Society Proceedings." Among others is the American Academy of Medicine, which will hold its twenty-ninth session. This organization will take up the reports of committees on the National Bureau of Medicine and Foods, on the teaching of hygiene in the public schools, and on medical education.

The next session of the Association of American Medical Colleges will be held in Atlantic City, Monday, June 6. At the educational session at 10 a. m., to which visitors are invited, there will be the following program:

President's Address. J. R. Guthrie, Dubuque, Iowa.

Under What Conditions Should a Medical College Give a Student Advanced Standing? William H. Wathen, Louisville, Ky.

What Credit, If Any, Should Be Given by Medical Colleges to Holders of Baccalaureate Degrees? Mr. Henry L. Taylor, Albany, N. Y.

A Plea for Uniform Curricula in Medical Colleges. George M. Kober, Washington, D. C.

This program is preliminary, and other papers may be added.

At 2:30 Monday afternoon the business meeting will be held. The secretary-treasurer of the association is Dr. Fred C. Zapffe, 1764 Lexington Street, Chicago. The dean of each college holding membership in the association is its accredited representative at this meeting. Representatives other than the dean must present signed credentials. Each college is entitled to one representative.

RAILROAD RATES.

The prospect of a large attendance at Atlantic City, one which will, perhaps, be the largest of any session the American Medical Association has yet held, depends on two facts. The profession was never so well organized as at present, and the railroad rates have never been so favorable. The low rate, combined with the nearness of Atlantic City to the large cities of the East, where the American Medical Association has so many members, make the prospects very bright for this session.

The Trunk Line Association has granted a rate of one fare plus $1.00 for the round trip, except within 100 miles of Atlantic City. Within the 100-mile radius the regular excursion fare will apply. The tickets are to be for continuous passage and must be deposited with the joint agent on arrival at Atlantic City for his indorsement, but on returning, stop-overs will be allowed at Philadelphia, Washington and Baltimore. These tickets will be sold and will be good for passage June 1, 2, 3, 5 and 6, and will be good for return leaving Atlantic City June 4 to 13, inclusive.

The Central Passenger Association has granted the same rates. The Western Passenger Association has granted a rate of one fare plus $2.00 for the round trip, tickets on sale June 1 to 4, and good returning till June 13, with privilege of extension under certain conditions. Stop-overs will be granted as above. Information from other passenger associations indicates that most of them will grant similar rates.

SPECIAL TRAINS AND EXCURSIONS.

As is usual, various trains will be run through various parts of the country; Iowa, Missouri, the Northwest and some parts of the South will have their special trains. At least one special will be run from Chicago over the Pennsylvania System, and will leave Chicago Sunday, June 5, at 2 p. m. There will probably be at least two sections, as many western parties will arrange to take this train. This will be an elaborately fitted and complete train, and a most enjoyable time may be expected by the travelers.

A number of excursions can be arranged from Atlantic City, others from New York City, following the session. Large delegations are expected to stop in Philadelphia, both before and after the meeting, to attend the clinics. In this issue will be found a complete schedule of these clinics that have been arranged for the members of the Association in Philadelphia.

The Beach Toward the Inlet.

Another event is the unveiling of the Rush Monument, in Washington, Friday afternoon, June 10. Members of the Association will go in a body to witness this long-looked-for event.

ENTERTAINMENTS.

Atlantic City is a most delightful place in its social life. Those who attended the last session need no reassurance as to the prospect of an enjoyable time socially. The local committee on entertainment is preparing various enjoyable functions, and will give special attention to the events for the wives and other

ladies who accompany the members, so that the time shall pass pleasantly for them while the physicians are engaged in the scientific work of the meeting.

ATLANTIC CITY COMMITTEES.

The experience gained in the session of 1900—which was held at Atlantic City—has been of great value to the local committees in charge of the arrangements for this year. They report that matters are well in hand, and that affairs are working smoothly. The efficient local Committee of Arrangements consists of Dr. B. C. Pennington, chairman; Dr. J. A. Joy, treasurer; Dr. E. A. Reilly, registrar; Dr. Philip Marvel, secretary.

The special committees whose active chairmen are looking after the details assigned to their respective departments are:

Dr. W. Blair Stewart, Finance.
Dr. Walter Reynolds, Halls and Meeting Places.
Dr. E. A. Reilly, Registration.
Dr. A. D. Cuskaden, Exhibits.
Dr. Theo. Senseman, Entertainments.
Dr. E. C. Chew, Bureau of Information.
Dr. Emery Marvel, Banquets.
Dr. Edward Guion, Printing.
Dr. W. E. Darnall, Hotels.
Dr. Joseph F. DeSilver, Badges, etc.
Dr. W. P. Conaway, New Membership.
Dr. J. M. Marshall, Transportation.

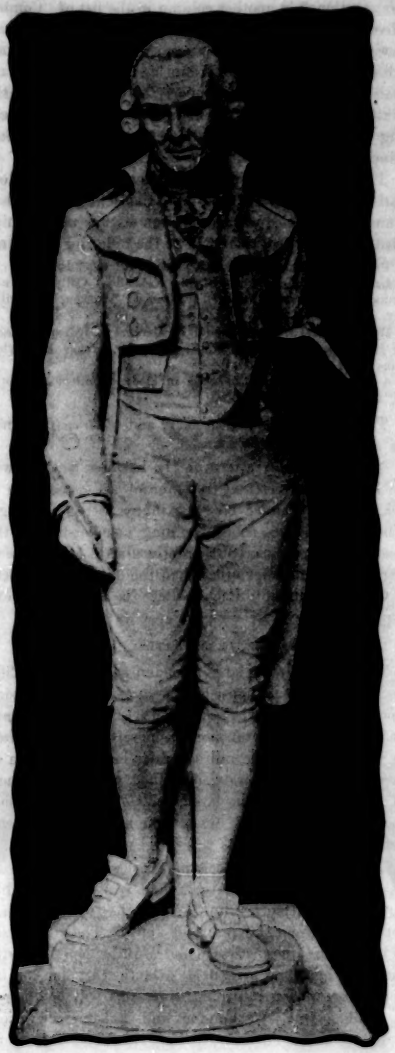
RUSH MONUMENT DEDICATION.

DESCRIPTION OF THE STATUE AND THE MONUMENT THAT ARE TO COMMEMORATE THE LIFE AND WORK OF THIS GREAT PHYSICIAN.

We reproduce this week illustrations[1] of the Rush Monument, which is to be dedicated at Washington, D. C., on the afternoon of Friday, June 10. Definite arrangements have not yet been made, but it is probable that a special train or trains will be run from Atlantic City to Washington for the accommodation of the members.

The illustrations show the general character of the monument. Dr. Rush is represented in a walking attitude, with paper and pen in his hand, apparently lost in thought. The general scheme is a simple one, and carries out the old idea of representing the subject as a full standing figure, on a pedestal somewhat higher, the whole resting on a base of three steps. To give this old idea any originality was difficult, but the architect has treated the subject in a particularly striking way by making the entire pedestal circular, something seldom attempted, and by treating the moldings and the decoration in the style of Louis XVI; in other words, in that time in which Dr. Rush flourished, and by the addition of three small bas-reliefs commemorating Dr. Rush's career as a physician, patriot and writer.

The choice of materials has been carefully made—the finest kind of bronze for the statue, the best Indiana limestone for the pedestal and pink granite for the steps. The base consists of three granite platforms, the lower one being 12 feet 9 inches across. Surmounting these steps is a pedestal consisting of the base, die



The Statue of Dr. Benjamin Rush.

and cap of hard Indiana limestone, the total height being 10 feet 4 inches. The base of the die is 4 feet 10 inches across. The height of the figure is 7 feet 6

1. Through the failure of the engravers to supply us the half-tone illustration of the monument in its completeness we are compelled to omit it. It will appear next week.

inches, and the plinth or base is 4 inches, making the total height of the statue alone 7 feet 10 inches.

The inscriptions, in gilt bronze, are as follows:

On the front panel: "Benjamin Rush, 1745-1813. Physician and Philanthropist."

On the right panel: "The First American Alienist."

On the left panel: "Signer of the Declaration of Independence."

On the rear panel: "Studium sine calamo somnium."[1]

The monument is being erected on the site originally designed by the Secretary of the Navy, on the elevation in the park opposite the U. S. Naval Museum of Hygiene and Medical School. The ground was broken for the pedestal March 23. The architect is Mr. Lewis R. Metcalfe, New York; the sculptor, Mr. R. Hinton Perry, and the bronze founders, the Henry-Bonnard Bronze Co., New York.

The present Rush Monument Committee consists of J. C. Wilson, M.D., Philadelphia; H. D. Holton, M.D., Brattleboro, Vt.; Frank Billings, M.D., Chicago; L. Duncan Bulkley, M.D., New York, and W. L. Rodman, M.D., Philadelphia.

The oration at the dedication will be delivered by Dr. J. C. Wilson, Philadelphia.

1. The Latin phrase was a favorite of Rush's, who used it in reference to his habit of making annotations as he read.

ASSOCIATION NEWS

OFFICIAL CALL.

THE FIFTY-FIFTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, TO BE HELD IN ATLANTIC CITY, JUNE 7-10, 1904.

To the Members of the American Medical Association, and to Constituent State Associations:

The next annual session of the American Medical Association will be held at Atlantic City, New Jersey, on Tuesday, Wednesday, Thursday and Friday, June 7, 8, 9 and 10, 1904. The first general meeting, which constitutes the opening exercises of the scientific functions of the Association, will be held at 10 a. m., Tuesday, June 7.

The Registration Department will be open from 8 a. m. to 5:30 p. m., on Monday, Tuesday, Wednesday and Thursday, June 6, 7, 8 and 9, and from 9 to 11 a. m. on Friday, June 10.

NEW MEMBERS.

Those who join the Association at its annual session must present certificates of membership in good standing in their state association or in one of its affiliated branches.

THE HOUSE OF DELEGATES.

The House of Delegates of the American Medical Association will convene at the High School Building, Atlantic City, New Jersey, at 10 a. m., Monday, June 6, 1904. Each constituent state and territorial association is entitled to one representative for each 500 of its resident regular members, or fraction thereof. "State associations or societies in counting members for a basis of delegate representation in this House shall count only members in good standing, who pay regular dues to the state association, either directly or indirectly through county societies."

"Members of the House of Delegates shall be elected for a term of two years, and those state and territorial associations entitled to more than one representative are requested so to arrange such elections that one-half of their delegates, as near as may be, shall be elected each year." (Chap. III, Sec. 4, By-Laws.)

GEORGE H. SIMMONS, Secretary. FRANK BILLINGS, President.

THE OFFICIAL PROGRAM.

In order to avoid misunderstandings and to protect the interests of advertisers, attention is called to the fact that there is but one official program. This program is copyrighted by the Board of Trustees and contains no advertising matter. It will not be distributed until the week of the session.

MEETING OF COMMITTEE ON MEDICAL LEGISLATION.

A meeting of the National Auxiliary Congressional and Legislation Committee will be held at 2:30 p. m., Wednesday, June 8, at the High School Building, Atlantic City, according to the call issued by the chairman, Dr. Charles A. L. Reed, Cincinnati.

ASSOCIATION COMMITTEES.

LIST OF STANDING COMMITTEES OF THE ASSOCIATION AND THEIR CHAIRMEN AND MEMBERS.

Following is a list of the standing committees of the Association:

Committee on Award of Association Medal.—Lewis S. McMurtry, Louisville, Ky., chairman; Burnside Foster, St. Paul, Minn.; M. H. Fussell, Philadelphia.

Committee on Award of Scan Medal.—James H. Dunn, Minneapolis, chairman; M. L. Harris, Chicago; Floyd W. McRae, Atlanta, Ga.

Committee on Scientific Exhibit.—F. B. Wynn, Indianapolis, chairman.

Committee on Scientific Research.—Alfred Stengel, Philadelphia, chairman; William Osler, Baltimore, and L. Hektoen, Chicago.

Committee on Organization.—J. N. McCormack, Bowling Green, Ky., chairman; P. Maxwell Foshay, Chicago; George H. Simmonds, Chicago.

Committee on Rush Monument.—James C. Wilson, Philadelphia, chairman; Henry D. Holton, Brattleboro, Vt., treasurer; Frank Billings, Chicago; L. Duncan Bulkley, New York; Wm. L. Rodman, Philadelphia.

Committee on National Legislation.—Charles A. L. Reed, Cincinnati, Ohio, chairman, one year; W. L. Rodman, Philadelphia, two years, and William H. Welch, Baltimore, three years.

Committee on Business.—Edwin Walker, Evansville, Ind.; A. R. Craig, Columbia, Pa.; George M. Kober, Washington, D. C.; T. J. Murray, Butte, Mont., and William Davis, St. Paul, Minn.

Committee on Transportation and Place of Session.—M. L. Harris, Chicago; F. H. Wiggin, New York; H. Bert Ellis, Los Angeles, Cal.; B. H. Hartwell, Ayer, Mass.; G. C. Savage, Nashville, Tenn.; H. A. West (deceased), Galveston, Texas, and A. F. Jonas, Omaha.

Committee on Major Walter Reed Monument.—W. W. Keen, Philadelphia, chairman; Joseph D. Bryant, New York City; A. T. Cabot, Boston; Victor C. Vaughan, Ann Arbor, Mich.; T. S. Cullen, Baltimore, and Frank Billings, Chicago.

Committee on Reapportionment.—William S. Foster, Pittsburg, chairman; P. Maxwell Foshay, Chicago; J. N. Hall, Denver, President-elect and Secretary ex officio.

Committee on National Incorporation.—Joseph D. Bryant, chairman, New York; H. L. E. Johnson, Washington, D. C.; Leartus Connor, Detroit; D. S. Fairchild, Des Moines, Iowa, and C. G. Kenyon, San Francisco.

Committee on Reciprocity.—W. L. Rodman, Philadelphia, chairman; William H. Welch, Baltimore; Joseph M. Mathews, Louisville, Ky.; Henry Beates, Jr., Philadelphia; T. J. Murray, Butte, Mont.

Committee on Public Health.—Herman Spaulding, Chicago, chairman; J. N. Hurty, Indianapolis; W. H. Sanders, Mobile, Ala.; H. A. West (deceased), Galveston, Texas; W. C. Gorgas, U. S. A.; V. C. Vaughan, Ann Arbor, Mich.

Committee on Prophylaxis of Venereal Diseases.—Henry D. Holton, Brattleboro, Vt., chairman; George M. Kober, Washington, D. C.; W. H. Sanders, Mobile, Ala.; Ludwig Weiss, New York, secretary; L. D. Bulkley, New York; Louis E. Schmidt, Chicago.

Committee on Credentials and Registration.—George H. Simmons, Chicago, chairman; P. Maxwell Foshay, Chicago; H. O. Walker, Detroit.

ORGANIZATION MEETING AT ATLANTIC CITY.

A CONFERENCE OF COUNCILORS AND STATE ASSOCIATION OFFICERS TO BE HELD TO DISCUSS THE SUBJECT OF ORGANIZATION.

The suggestion for a conference of councilors and secretaries of state associations and others interested during the coming session of the Association at Atlantic City has been received with so much favor in all sections of the country that the meeting has been decided on, and the program is now being arranged. It is proposed that the proceedings shall begin with ten-minute papers from experienced workers in organization work, and these to be followed by a general discussion involving a comparison of views and experiences.

The time and place of the meeting will be announced later in THE JOURNAL, as well as in the official program. The meeting will be arranged so as to interfere to the least possible extent with the meetings of the sections and of the House of Delegates. The meeting will be especially for councilors and secretaries of state societies, but all who are interested in the work of organization will be cordially invited to attend the conference and to take part in the proceedings.

THE SECTION PROGRAMS

OF THE FIFTY-FIFTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION AT ATLANTIC CITY, JUNE 7-10, 1904.

The following is a list of titles of papers to be read before the various sections at the coming session of the American Medical Association. The order in which the titles are printed here will not necessarily be followed in the official program. If there are any corrections to be made, write immediately to the secretary of the section and not to THE JOURNAL.

Section on Practice of Medicine.

Chairman, Alexander Lambert, New York City; Secretary, J. L. Miller, 100 State Street, Chicago.

Chairman's Address: The Adaptation of Pure Science to Medicine. Alexander Lambert, New York City.

Pernicious Anemia and Its Relation to Gastric Digestion, Based on Twenty-five Cases. Chas. G. Stockton, Buffalo, N. Y.

Diagnosis and Treatment of Perforation in Typhoid Fever. Morris Manges, New York City.

A Case of Typhoid Fever with an Unusual Complication. William E. Darnall, Atlantic City, N. J.

Mortality and Management of Pneumonia. Edward F. Wells, Chicago.

The Study of a Series of Cases of Pneumonia, with Special Reference to Diagnosis and Complications. Joseph Sailer, Philadelphia.

Appendicitis from the Standpoint of the Physician. S. G. Bonney, Denver.

Has Influenza Been a Causative Factor in the Increase of Appendicitis? Philip Marvel, Atlantic City, N. J.

SYMPOSIUM ON ARTERIOSCLEROSIS.

Pathology of Arteriosclerosis. William H. Welch, Baltimore.

Arteriosclerosis from Acute Infectious Diseases. W. S. Thayer, Baltimore.

Arteriosclerosis of Syphilitic Origin. C. Travis Dreuen, Hot Springs, Ark.

Arteriosclerosis of Nephritic Origin. George Dock, Ann Arbor, Mich.

Arteriosclerosis Due to Metallic Poisons. Frank Billings, Chicago.

Arteriosclerosis of Alcoholic Origin. Richard Cabot, Boston.

Arteriosclerosis and Angina Pectoris. William Osler, Baltimore.

Treatment of Arteriosclerosis. James Anders, Philadelphia.

Aneurism of the Innominate Aorta. A. P. Francine, Philadelphia.

A Study of One Hundred and Eighty-six Cases of Mitral and Tricuspid Stenosis. Judson Daland, and E. L. McDaniel, Philadelphia.

Pleural Effusion in Heart Disease. J. Dutton Steele, Philadelphia.

Prolonged Delirium in Pericarditis and Endocarditis, with Report of a Case. E. M. Green, Easton, Pa.

Limitations of Digitalis in Heart Disease. Frank Jones, Memphis, Tenn.

Treatment of Cardiac Disease by Means of the Pneumatic Cabinet. Charles E. Quimby, New York City.

SYMPOSIUM ON GALL-BLADDER DISEASE.

Etiology of Cholecystitis and Cholelithiasis. Walter L. Bierring, Iowa City, Iowa.

Relation of Cholelithiasis to Diseases of the Pancreas. Eugene L. Opie.

The Relation of Disease of the Gall Bladder and Bile Ducts to Disorders of the Stomach and Intestines. Bertram W. Sippy, Chicago.

Diagnosis of Cholecystitis and Cholelithiasis. Joseph A. Blake, New York City.

Treatment of Cholecystitis and Cholelithiasis. Lucius W. Hotchkiss, New York City.

Ergot in General Practice. Alfred T. Livingston, Jamestown, N. Y.

Differential Leucocyte Count as an Aid in the Diagnosis of Fevers. William Krauss, Memphis, Tenn.

Pathogenesis of Uremic and Eclamptic Convulsions. Robert N. Willson, Philadelphia.

Amebic Dysentery; Its Local Lesions and Treatment. James P. Tuttle, New York City.

The Administration of Pancreas Muscle and Pancreas Liver Extracts in Diabetic Glycosuria. A. C. Croftan, Chicago.

Exophthalmic Goiter, Mitral Regurgitation, Bright's Disease and Retinitis Occurring Simultaneously in the Same Individual. Problem of Correlation. Arthur R. Elliott, Chicago.

Suicide; Some Instructive Cases. John L. Davis, Cincinnati.

SYMPOSIUM ON ARTHRITIS DEFORMANS.

Pathology and Etiology of Arthritis Deformans. Thomas McCrae, Baltimore.

Symptomatology of Arthritis Deformans. J. J. Walsh, New York City.

Treatment of Arthritis Deformans. Clarence E. Skinner, New Haven, Conn.

How the General Practitioner Should Treat Gonorrhea. Ferd. C. Valentine, New York City.

Problems for the Tuberculous Convalescent. A. Mansfield Holmes, Denver.

The Family Physician as a Factor in the Solution of the Tuberculosis Problem. S. A. Knopf, New York City.

Section on Obstetrics and Diseases of Women.

Chairman, L. H. Dunning, Indianapolis; Secretary, C. L. Bonifield, 432 West Fourth Street, Cincinnati.

Chairman's Address: Last Year's Progress in Gynecology. Senile Endometritis. L. H. Dunning, Indianapolis.

Further Experience in the Use of the Electrothermic Clamps in the Treatment of Cancer of the Uterus. Charles P. Noble, Philadelphia.

Primary Chorioepithelioma Malignum Outside of the Placental Site. Palmer Findley, Chicago.

The Technic of Wounds Incident to Laparotomy. H. O. Marcy, Boston.

Occipito-Posterior Position. J. M. Duff, Pittsburg.

Diagnosis and Treatment of Pelvic Deformity. George Boyd, Philadelphia.

Heart Disease as an Obstetric Complication. C. S. Bacon, Chicago.

The Obstetrician as a Specialist. J. B. DeLee, Chicago.

Comparative Value of the Different Methods for Accouchement Forcé. Gustav Zinke, Cincinnati.

Is Cesarean Section a Rational Method of Treatment in Placenta Previa? J. F. Moran, Washington, D. C.

A New Method of Determining the Size of the Conjugate Vera by Direct Measurement. W. Frank Haehnlen, Philadelphia.

The Propriety, Indications and Methods for the Termination of Pregnancy. Frank A. Higgins, Boston.

The Influence of Ovarian Implantation on Menstruation in Women. A. Palmer Dudley, New York City.

Repair of Pelvic Floor Lacerations. James H. Burtenshaw, New York City.

The Etiology and Pathology of Cystocele, with a New Operation for Its Relief. J. Riddle Goffe, New York City.

Primary and Secondary Repair of Injuries to the Anterior Vaginal Wall in Labor. B. C. Hirst, Philadelphia.

Injury to the Rectum in the Gynecologic Examination. Howard A. Kelly, Baltimore.

Treatment of Complete Uterine and Vaginal Prolapse. F. H. Wiggin, New York City.

The Advantages and Disadvantages of the Various Surgical Procedures for Relief of Retrodisplacements. E. E. Montgomery, Philadelphia.

Operations for Retroversion of the Uterus, with Special Reference to Effect on Subsequent Pregnancies. Franklin Martin, Chicago.

Two Cases of Retention of Urine Due to Retrodisplacement of the Gravid Uterus. Reuben Peterson, Ann Arbor, Mich.

Malformation of the Placenta. Henry F. Lewis, Chicago.

The Disease and Injuries Following Childbirth and Their Prevention. Edward J. Ill, Newark, N. J.

The Surgical Treatment of Bilocular Uterus and Bifid Vagina. H. W. Longyear, Detroit.

Postoperative Phlebitis of Femoral Veins. A. H. Cordier, Kansas City, Mo.

Clinical Experience with the Appendiculo-Ovarian Ligament. Daniel H. Craig, Boston.

Some Cases of Ectopic Gestation with Atypical Symptoms. Walter B. Dorsett, St. Louis.

A Plea for More Thorough Examinations of Doubtful Specimens of Ectopic Pregnancy. J. Wesley Bovée, Washington, D. C.

A Plea for Conservative Operations on the Ovaries from a Neurotic Standpoint, with a Report of Cases. J. W. Cokenower, Des Moines, Iowa.

Management of the Acute Infective Stages of Abdominal Inflammation. George Erety Shoemaker, Philadelphia.

Multiple Abscesses of the Omentum Following Grave Septic Peritonitis. Report of Two Cases. Hugo O. Pantzer, Indianapolis.

The Use of the Stem Pessary for Scanty and Painful Menstruation. J. H. Carstens, Detroit.

A Series of Mistaken Gynecologic Diagnoses. T. S. Cullen, Baltimore.

Membranous Endometritis. F. F. Lawrence, Columbus, O.

Malignancy of Ovarian Tumors. E. W. Cushing, Boston.

The Invasion of Carcinoma of the Uterine Cervix into the Surrounding Tissues. John A. Sampson, Baltimore.

The Prevention and Treatment of Postpartum Hemorrhage. Edward P. Davis, Philadelphia.

Section on Surgery and Anatomy.

Chairman, Charles A. Powers, Denver; Secretary, E. Wyllys Andrews, 100 State Street, Chicago.

Chairman's Address. Charles A. Powers, Denver.

Rupture of Mesenteric Glands During Typhoid Fever Simulating Intestinal Perforation; Report of a Case, with Operation and Recovery. Robert G. Le Conte, Philadelphia.

SYMPOSIUM ON APPENDICITIS.

Factors in the Mortality of Appendicitis. John B. Deaver, Philadelphia.

Appendicitis in Children. A. J. McCosh, New York City.

Papilloma of Appendix. N. B. Carson, St. Louis.

The Diagnosis of Appendicitis. Should the Appendix Be Removed when the Abdomen Is Opened for Other Conditions? Floyd W. McRae, Atlanta, Ga.

The Surgical Treatment of Gastroptosis. R. C. Coffey, Portland, Ore.

Excision of the Ileum. J. Shelton Horsley, El Paso, Texas.

Experimental Research on the McGraw Elastic Ligature. J. W. Draper Maury, New York City.

The Disadvantages of the Murphy Button. Robert F. Weir, New York City.

Gallstones of the Common Duct. Archibald MacLaren, St. Paul, Minn.

Anatomy of Inguinal Hernia; Andrews' Operation for Radical Cure. D. N. Eisendrath, Chicago.

Four Cases of Strangulated Hernia (Two Femoral, Two Inguinal), Successfully Treated by Primary Resection of Bowel Through Supplementary Abdominal Incision, Followed by Radical Operation at Hernial Site. John Young Brown, St. Louis.

Three Years' Experience with the Autoplastic Suture for Hernia. L. L. McArthur, Chicago.

Old Dislocations; How Shall We Treat Them? De Forest Willard, Philadelphia.

The Treatment of Fracture of the Patella by Lateral Suture. Joseph A. Blake, New York City.

The Treatment of Cold Abscesses and Sinuses in Tuberculous Disease of Bone. V. P. Gibney, New York City.

Impacted Fracture of the Head and Neck of the Femur. Le Moyne Wills, Los Angeles, Cal.

Laminectomy; A Further Contribution. John C. Munro, Boston.

The Surgical Treatment of Certain Cases of Arthritis Deformans. Martin B. Tinker, Clifton Springs, N. Y.

A Successful Removal of Bullet from the Brain. John A. Wyeth, New York City.

Intracranial Neurectomy for Trigeminal Neuralgia; Cases and Comment. Harry M. Sherman, San Francisco.

What Is the Proper Treatment of Suspicious Tumors of the Breast? J. Clark Stewart, Minneapolis.

The Danger of Allowing Warts and Moles to Remain Lest They Become Malignant. W. W. Keen, Philadelphia.

Ten Years' Experience with My Method of Radical Operation for Carcinoma of the Breast. Willy Meyer, New York City.

Kidney Stones; Diagnosis and Treatment. A. D. Bevan, Chicago.

SYMPOSIUM ON THE PROSTATE.

Prostatectomy. James E. Moore, Minneapolis.

Suprapubic Enucleation of the Prostate. H. O. Walker, Detroit.

Prostatectomy, Especially by the Perineal Route. George Goodfellow, San Francisco.

Prostatectomy. Parker Symes, New York City.

Experimental Studies in Gastroenterostomy and Other Reports. H. L. Burrelle, Boston.

Further Report of Four Cases. Charles H. Frazier, Philadelphia.

Excision of the Ulcer-Bearing Area in Gastric Ulcer. W. L. Rodman, Philadelphia.

Fat Embolism of Lung Following Fractures, with Report of Two Cases. F. Gregory Connell, Leadville, Colo.

Matas' Operation for Popliteal Aneurism. J. F. Binnie, Kansas City, Mo.

The Preparatory and Postoperative Treatment of Surgical Cases. L. Sexton, New Orleans.

Surgery of the Trifacial Nerve and Its Ganglia. J. B. Murphy, Chicago.

Beside the above the following will read papers, but their titles have not yet been received: Maurice H. Richardson, Boston; George Ben Johnston, Richmond, Va., and J. H. Burry, Chicago.

Section on Hygiene and Sanitary Science.

Chairman, G. T. Swarts, Providence, R. I. Secretary, J. S. Fulton, 1809 St. Paul Street, Baltimore.

The officers of this section have not favored us with their program.

Section on Ophthalmology.

Chairman, Robert L. Randolph, Baltimore; Secretary, Albert E. Bulson, Jr., Fort Wayne, Ind.

Chairman's Address: Thoughts Suggested by a Study of the Eye Injuries of Independence Day. Robert L. Randolph, Baltimore.

The Treatment of Purulent Ophthalmia. Myles Standish, Boston.

Postoperative Infection of the Eye. J. A. White, Richmond.

Tumors of the Orbit. H. V. Würdemann, Milwaukee; Brown Pusey, Chicago.

A Case of Pulsating Exophthalmus; Successive Ligation of Both Common Carotids; Death. Howard F. Hansell, Philadelphia.

Intermittent Exophthalmus, with the Report of a Case. William C. Posey, Philadelphia.

Diaphoresis and Diaphoretics in Ophthalmic Therapeutics. Hiram Woods, Baltimore, and T. A. Woodruff, Chicago.

The Importance of General Therapeutics in the Management of Ocular Affections. A. Maitland Ramsay, Glasgow, Scotland. (By special invitation.)

(a) A Case of Syphilitic Iridochoroiditis of One Eye, with a Marked Perforative Syphiloma in the Upper Ciliary Region; Recovery. (b) A Case of Congenital Sensory Alexia, Combined with Paresis of the Superior Rectus of the Left Eye and of the Inferior Rectus of the Right. Herman Knapp, New York City.

Is Bilateral Operation for Cataract Ever Justifiable, and If Not, How Soon After the Operation on the First Eye Is It Safe to Extract the Second Cataract? A. W. Calhoun, Atlanta, Ga.

Reclination of the Lens; Under Certain Conditions a Justifiable Operation. F. T. Rogers, Providence, R. I.

Septic Thrombosis of the Cavernous Sinus, with a Report of Three Cases. E. C. Ellett, Memphis, Tenn.

The Conservative Treatment of Affections of the Lachrymal Apparatus. S. D. Risley, Philadelphia.

The Mathematical Point of Reversal in Skiascopy. Swan M. Burnett, Washington.

Some Injuries of the Eye in Their Medicolegal Aspect. John J. Kyle, Indianapolis.

Blindness and Oculomotor Palsies from Injuries Apparently Not Involving the Optic or Oculomotor Nerves. Alvin A. Hubbell, Buffalo.

The Ocular Symptoms of Lesions of the Optic Chiasm. G. E. de Schweinitz and John T. Carpenter, Philadelphia.

Saccharine Saline Injections in Ophthalmic Practice. L. Webster Fox, Philadelphia.

Operations on the Eyeball in the Presence of an Infected Conjuctival Sac. Charles S. Bull, New York City.

Temporal Cleft of the Nervehead and the Other Fundus Anomalies Often Present with It. Charles H. Beard, Chicago.

Obstructions in the Retinal Arteries. Allen Greenwood, Boston.

Some Problems of Presbyopia. Geo. M. Gould, Philadelphia.

Development of the Faculty of Binocular Vision. Edward Jackson, Denver.

Clinical and Histologic Observations on Sympathetic Ophthalmia. Clarence Veasey, Philadelphia.

Operative Procedures on the Exciting Eye and the Sympathizing Eye in Cases of Sympathetic Ophthalmia. John E. Weeks, New York City.

Sympathetic Ophthalmitis. Samuel Theobald, Baltimore.

The Environment and Visual Requirements of Railway Engineers and Firemen; Personal Observations from an Engine Cab. Nelson M. Black, Milwaukee.

The Molar Teeth and the Patellar Reflex in Interstitial Keratitis Due to Inherited Syphilis. George F. Suker, Chicago.

New Views Regarding the Horopter. George T. Stevens, New York City.

Blastomycosis of the Eyelid, with Report of Cases. William H. Wilder, Chicago.

Brief Report of Additional Cases of Sympathectomy for Glaucoma. W. B. Marple, New York City.

An Exact and Secure Tucking Operation for Advancing an Ocular Muscle, Illustrated by Demonstration on a Manikin. F. C. Todd, Minneapolis.

Injuries of the Iris, with Report of a Case of Iridodialysis in Which There Was a Complete Reattachment of the Iris. Ellett O. Sisson, Keokuk, Iowa.

Methyl Alcohol Intoxication. Frank Buller, Montreal, Canada. (By special invitation.)

The Axis of Astigmatism. J. H. Claiborne, Jr., New York City.

The Usefulness of the Ophthalmometer. F. C. Heath, Indianapolis.

The Relation of Corneal Curvatures to the Refraction of the Eye. G. Melville Black, Denver.

Subjective Refraction. John A. Tenney, Boston.

Some New Test Types for the Reading Distance. Charles H. Williams, Boston.

Double Radial Rupture of the Iris Causing a Complete and Well-Formed Iridectomy. S. C. Ayers, Cincinnati.

Section on Diseases of Children.

Chairman, Charles G. Kerley, New York City; Secretary, C. F. Wahrer, Ft. Madison, Iowa.

Chairman's Address: The Demands of the Child by Virtue of Right. Charles Gilmore Kerley, New York City.

Erythema Nodosum in Children. Isaac A. Abt, Chicago.

The Early Diagnosis and Treatment of Whooping Cough. Philip F. Barbour, Louisville, Ky.

Whooping Cough; Its Treatment by Means of the Elastic Belt. Theron W. Kilmer, New York City.

Some Clinical Observations on Malnutrition and Its Relationship to Infantile Tuberculosis. Louis Fischer, New York City.

Amaurotic Family Idiocy: A Report of Two Cases in Sisters. A. C. Cotton, Chicago.

How to Produce the Best Milk for Infant Feeding. Edward F. Brush, Mt. Vernon, N. Y.

The Initial Contamination of Dairy Milk. Richard Cole Newton, Montclair, N. J.

Phlyctenular Ophthalmia. Albert R. Baker, Cleveland, Ohio.

The Effect of Uncorrected Refractive Errors and Muscular Unbalance on the Nervous System of Children. J. H. Claiborne, New York City.

Congenital Occlusion of the Lachrymal Canal and the Acute Inflammation of the Conjunctiva Occurring in Children. John E. Weeks, New York City.

Precautions Used by the New York Health Department to

Prevent the Spread of Contagious Diseases in the City Schools. Thomas Darlington, New York City.

Perinephritis. Wisner R. Townsend, New York City.

Enuresis. Maurice Ostheimer and I. Valentine Levi, Philadelphia.

SYMPOSIUM ON DIARRHEA.

The Bacteriology of Summer Diarrhea. William H. Park, New York City.

A Summer's Experience with Infantile Dysentery. J. H. Mason Knox, Jr., Baltimore.

A Study of 28 Cases of Diarrhea in Children. John C. Cook, Chicago.

The Management of Summer Diarrhea. Thomas S. Southworth, New York City.

Treatment of Acute Diarrhea in Infants, and Its Dietetic Management. Henry L. Coit, Newark, N. J.

Dilatation of the Colon in Children. William Osler, Baltimore.

Hematuria as the Earliest or Only Symptom of Infantile Scurvy. John Lovett Morse, Boston.

Some Points on General Anesthesia in Children. Thomas L. Bennett, New York City.

Diseases of Children Occasioned by Affections of the Nose; the Necessity for Recognition and Treatment. Louis J. Lautenbach, Philadelphia.

The Importance of an Early Aural Examination in Acute Inflammatory Diseases. James F. McKernon, New York City.

The Prognosis of Pneumonia in Infants and Young Children, in Private Practice. L. Emmett Holt, New York City.

Diagnosis of Enlarged Bronchial Lymph Nodes. Alfred Friedlander, Cincinnati.

The Management of Hernia in Infancy and Childhood, with Results of Operative Treatment. William B. Coley, New York City.

Intestinal Obstruction in Children. John F. Erdman, New York City.

Nervous Diseases in Children. Barnard Sachs, New York City.

Chorea. W. C. Hollopeter, Philadelphia.

A Case of Landry's Paralysis in a Child. Henry Enos Tuley, Louisville, Ky.

Lymphoid Affections in the Upper Air Tract of Children; Their Diagnosis and Treatment. Walter F. Chappell, New York City.

Adenoids in Children; Their Treatment, Medical and Surgical. Charles M. Robertson, Chicago.

Chronic Constipation in the Infant. J. Ross Snyder, Birmingham, Ala.

Some Physical Signs in Infants and Children Not Generally Recognized. Samuel McClintock Hamill and Theodore Le Boutillier, Philadelphia.

The Care of Infants in Public Institutions. H. M. McClanahan, Omaha.

A Case Conjoining Myxedema and Diabetes Mellitus. August Adrian Strasser, Arlington, N. J.

Section on Stomatology.

Chairman, G. V. Eames, Boston; Secretary, Eugene S. Talbot, 103 State Street, Chicago.

SYMPOSIUM ON DENTAL EDUCATION.

Chairman's Address: The Value of Symmetry in the Development of Professional Character and Education. George V. Eames, Boston.

The Evolution of Standards in Dental Education. Charles Chittenden, Madison, Wis.

Phases of Dental Education. A. E. Baldwin, Chicago.

Dental Education, a Retrogressive and Prospective View. John S. Marshall, San Francisco.

SYMPOSIUM ON THE DENTAL PULP.

Neoplasm of the Tooth Pulp. Vida A. Latham, Rogers Park, Ill.

Vital Principles in Adult Pulp. R. R. Andrews, Cambridge, Mass.

Degeneration of the Tooth Pulp. Eugene S. Talbot, Chicago.

The Pulp. Jos. Arkovy, Budapest, Hungary.

A System for Surgical Treatment of Hare-lip, Cleft Palate and Facial Deformities and Postoperative Speech Education. George V. I. Brown, Milwaukee, Wis.

Multiple Fracture of Lower Jaw Complicated by Simultaneous Fracture of the Upper Jaw. Thomas L. Gilmer, Chicago.

Impacted Teeth; Their Diagnosis, Liberation and Extraction. Matthew H. Cryer, Philadelphia.

Ankylosis of the Jaw. G. Lenox Curtis, New York City.

Necrosis of the Bones of the Face. Stewart L. McCurdy, Pittsburg, Pa.

Treatment of Pathologic Irregularities of the Teeth. M. H. Fletcher, Cincinnati.

Report of a Case of Vincent's Angina and Stomatitis, with Photographs. George C. Crandall, St. Louis.

Oral Infection and Sterilization. M. L. Rhein, New York City.

Changes in the Salivary Secretions as Affected by Systemic Disease. Heinrich Stern and William Lederer, New York City.

Prophylaxis in Relation to Tooth Environment and to the Prophylactic Value of Materials Employed. Chas. F. Allan, Newburgh, N. Y.

The Physician's Duty to the Child from a Dental Standpoint. Alice Steeves, Boston.

Ethics. Adelbert H. Peck, Chicago.

Section on Nervous and Mental Diseases.

Chairman, F. Savary Pearce, Philadelphia; Secretary, David I. Wolfstein, 22 West Seventh Street, Cincinnati.

Chairman's Address: Nervous and Mental Diseases, Past, Present and Future. F. Savary Pearce, Philadelphia.

Report of Committee on the Collection of Information Regarding Public School Methods and Their Effects on the Mental and Physical Health of School Children. W. J. Herdman, Ann Arbor, Mich.

SYMPOSIUM ON CHOREIFORM AND OTHER SPASMODIC MOVEMENTS.

Symptomatology, Pathology and Treatment of Choreiform Movements. William G. Spiller, Philadelphia.

Convulsive Tic. Hugh T. Patrick, Chicago.

Hysterical Movements. Howell T. Pershing, Denver.

Dementia Precox. F. X. Dercum, Philadelphia.

Early Diagnosis of Paresis. Lambert Ott, Philadelphia.

The Treatment of Aphasia by Training; With Some Remarks on the Re-education of the Adult Brain. Charles K. Mills, Philadelphia.

The Present Campaign Against Insanity. W. J. Herdman, Ann Arbor, Mich.

The Dividing Line Between Neuroses and Psychoses and the Position of Neurasthenia. Richard Dewey, Wauwatosa, Wis.

The Nature of Traumatic Sclerosis. Arthur C. Brush, Brooklyn.

A Tumor of the Frontal Lobe. W. W. Keen, Philadelphia, and Philip King Brown, San Francisco.

A Case of Brain Tumor with Peculiar Clinical and Medico-legal Features. A. P. Ohlmacher, Gallipolis, Ohio.

A Brain Tumor with Progressive Blindness as Its Most Prominent Feature; with Microscopic Report. W. C. Kendig and D. I. Wolfstein, Cincinnati.

Some Unusual Forms of Multiple Neuritis. Wharton Sinkler, Philadelphia.

An Experimental and Clinical Study of the Pressure Palsies and Allied Conditions in the Peripheral Nerves. D. J. McCarthy, Philadelphia.

A Clinico-Pathologic Study of Hemiplegia. T. H. Weisenburg, Philadelphia.

Facial Paralysis, Bilateral with Marked Sensory and Reflex Defects, Possibly Due to La Grippe. Frank W. Langdon, Cincinnati.

Tuberculosis of the Nervous System. D. J. McCarthy, Philadelphia.

A Case of Spastic Diplegia Following Whooping Cough, with Autopsy. John H. W. Rhein, Philadelphia.

Two Cases of Congenital Deformity, Possibly Due to Intrauterine Disease of the Spinal Cord. Charles W. Burr, Philadelphia.

A Case of Locomotor Ataxia, Complicated by a Tremor Resembling Paralysis Agitans, with Autopsy. John H. W. Rhein, Philadelphia.

A Promising Case of Locomotor Ataxia. Guy W. Hinsdale, Hot Springs, Va.

The Surgical Treatment of Poliomyelitis. W. G. Spiller and Charles Frazier, Philadelphia.

A New Dynamometer. H. E. Wetherill, Philadelphia.

The Quarter-Decade and Semi-Decade Treatment and Curability of Epilepsy. Charles H. Hughes, St. Louis.

Localized Convulsive Seizures; with Report of a Case. Samuel Bell, Detroit.

Have Drug Habits a Pathologic Basis? Albert E. Sterne, Indianapolis.

Minor or Borderline Psychoses of Alcoholism. Frank P. Norbury, Jacksonville, Ill.

Should Inebriates Be Punished by Death for Crime? T. D. Crothers, Hartford, Conn.

Hysterical Delirium, with Report of Four Cases. Theodore Diller, Pittsburg, Pa.

Psychic Influence. Brooks F. Beebe, Cincinnati.

Report of the Committee on Public School Methods and Psychoses.

Section on Cutaneous Medicine and Surgery.

Chairman, Henry G. Anthony; Secretary, R. R. Campbell, 204 Dearborn Street, Chicago.

Chairman's Address: Developmental Defects in the Skin. H. G. Anthony, Chicago.

Iodin Medication. W. L. Baum, Chicago.

Cover-glass Cultures and Their Possibilities in Studying the Epidermic Fungi. J. Frank Wallis, Philadelphia.

Acne Keratosa. William S. Gottheil, New York City.

A Second Case of Larva Migrans. Henry W. Stelwagon, Philadelphia.

Report of a Case of Paget's Disease of the Gluteal Region. John A. Fordyce, New York City.

The Consideration of Late Hereditary Syphilis. R. R. Campbell, Chicago.

The Treatment of Lupus Erythematosus by Repeated Refrigeration with Ethyl Chlorid. M. B. Hartzell, Philadelphia.

Affections of the Mucous Membrane of the Mouth and of the Lips in Lichen Planus. David Lieberthal, Chicago.

Report of a Remarkable Case of Xanthoma. John V. Shoemaker, Philadelphia.

Indurated Erythema and Its Relation to Tuberculosis. Grover W. Wende, Buffalo, N. Y.

Linear Nevi. M. L. Heidingsfeld, Cincinnati.

Report on Several Interesting Dermatologic Cases. Louis E. Schmidt, Chicago.

The Diagnosis of Scarlatina and Scarlatinoid Affections. Jay F. Schamberg, Philadelphia.

A Case of Eczema of the Hands Controlled with the X-Ray. D. W. Montgomery, San Francisco.

Radium and Its Therapeutic Possibilities. W. A. Pusey, Chicago.

Falling of the Hair. R. A. McDonnell, New Haven, Conn.

X-Ray Therapy in Skin Diseases. G. E. Pfahler, Philadelphia.

The Use and Abuse of Ointments. L. D. Bulkley, New York City.

Comparison of Phototherapy, Radiotherapy and High Frequency Therapy in Skin Diseases. C. W. Allen, New York City.

A False or Cicatricial Keloid. A. Ravogli, Cincinnati.

Prurigo (Hebra) as Observed in the United States. William T. Corlett, Cleveland.

Treatment of Hyperidrosis, Especially Hyperidrosis Pedum, with Permanganate of Potash. Ludwig Weiss, New York City.

A Case of Dermatitis Herpetiformis Treated with the X-Rays. William T. Corlett, Cleveland.

Exhibition of Photographs.

Lantern slide demonstration of interesting cases, etc., will be given on the afternoon of the first day of the session.

Section on Laryngology and Otology.

Chairman, J. F. Barnhill, Indianapolis; Secretary, Otto T. Freer, 288 Huron Street, Chicago.

Chairman's Address: The Present Status of Otology; How May We Improve It? John F. Barnhill.

Reflex Apnea and Cardiac Inhibition in Operations on the Respiratory Tract. William H. Good and W. G. B. Harland, Philadelphia.

The Ultimate Results of Cauterization on the Tissues in the Nose. J. L. Goodale, Boston.

Tonsillectomy by Forceps and Snare, Thorough, Painless and Safe. E. Fletcher Ingals, Chicago.

The Significance of Tubercular Deposits in the Tonsils. George B. Wood, Philadelphia.

Throat Complications of Typhoid Fever. Francis J. Quinlan, New York City.

Lithemic Nasopharyngitis Due to Systemic Disturbances. J. A. Stucky, Lexington, Ky.

The Relation of the Chemistry of the Saliva (Sialo-Semeiology) and Nasal Secretions to Diseases of the Mucous Membrane of the Mouth and Upper Respiratory Tract. D. Braden Kyle, Philadelphia.

Hemorrhage of the Larynx. John Edwin Rhodes, Chicago.

A Review of One Hundred Operations for the Correction of Deviation of the Nasal Septum; Remarks on Septal Operations. Joseph S. Gibb, Philadelphia.

Spontaneous Tonsillar Hemorrhage. Lewis S. Somers, Philadelphia.

Hemorrhage Complicating Peritonsillitis. Robt. Levy, Denver.

Reversional Vestiges in the Human Pharynx as Sources of Irritation. Norval Pierce, Chicago.

A Report of Some Unusual Intubation Cases. Burt Russell Shurly, Detroit.

The Radical Operation for Chronic Suppurative Frontal Sinusitis. W. Freudenthal, New York City.

The Present Position of Operative Interference in Chronic Suppuration of the Frontal Sinus. (With demonstration.) A. Logan Turner, Edinburgh, Scotland.

The Present Status of the Treatment for Deafness Due to Chronic Catarrhal Otitis Media. Philip D. Kerrison, New York City.

The Hot Water Douche in Treatment of Chronic Catarrhal Deafness. G. P. Head, Chicago.

The Treatment of Otitic Septicemia. B. Alexander Randall, Philadelphia.

Plastic Operations for the Closure of Post-Aural Openings Following Radical and Mastoid Operations. E. B. Dench, New York City.

The Palliative Treatment of Acute Mastoiditis, and Its Limitations. Philip Hammond, Boston.

Acute Osteomyelitis as Affecting the Temporal Bone. Charles W. Richardson, Washington, D. C.

Some Considerations Arising from the Difficulty of Choice of a Time for Mastoid Operation. Prospective Results. D. A. Kuyk, Richmond, Va.

Bezold's Mastoiditis, with Three Cases. Seymour Oppenheimer, New York City.

Tuberculosis of Both Middle Ears in an Infant. Dunbar Roy, Atlanta, Ga.

Operative Treatment of the Faucial Tonsils, with View to Prevention of Cervical Adenitis and General Infection. Robert C. Myles, New York City.

Two Cases of Objective Aural Tinnitus Due to the Action of the Tubopalatal Muscles. Walter S. Wells, Washington, D. C.

Section on Materia Medica, Pharmacy and Therapeutics.

Chairman, O. T. Osborne, New Haven, Conn.; Secretary, C. S. N. Hallberg, 358 Dearborn Street, Chicago.

Chairman's Address: The Scourge of Nostrums and Irregular Practitioners. Oliver T. Osborne, New Haven, Conn.

Report of Committee on Proprietary Medicines. Henry H. Moody, Mobile, Ala.; William J. Robinson, New York City, and Carl S. N. Hallberg, Chicago.

Federal Supervision of Drugs. Harvey W. Wiley, Washington, D. C.

Eighth Decennial Revision of the Pharmacopeia of the U. S. A. Joseph P. Remington, Philadelphia.

The Relation of the Physician to Proprietary Remedies. How May Substitution Be Avoided and the Desired Preparation Obtained Without Unduly Advertising the Manufacturer? William J. Robinson, New York City.

The Therapeutic Value of Parotid, Ovarian and Mammary Substances. John B. Shober, Philadelphia.

The Relation of the Internal Secretions to Epilepsy, Puerperal Eclampsia and Kindred Convulsive Disorders. Charles E. D. Sajous, Philadelphia.

Vasodilation and Its Production by Drugs. Arthur R. Elliott, Chicago.

The Control of Internal Hemorrhage by Drugs. Thomas Coley, Philadelphia.

SYMPOSIUM ON THE ARTIFICIAL AND PATHOLOGIC PERVERSIONS OF METABOLISM AND THEIR RELATION TO GOUT.

Drugs Irritant to the Kidneys and Hence to Be Avoided in Impaired Kidney Function. Torald Sollmann, Cleveland.

The Action of Drugs on the Liver and the Drugs to Be Avoided in Liver Disturbances. Alfred C. Croftan, Chicago.

Some Aspects of the Newer Physiology of the Gastrointestinal Canal. Lafayette B. Mendel, New Haven, Conn.

The Etiology and Pathology of Gout. Thomas B. Futcher, Baltimore.

The Prevention of Gout and the Management of Its Manifestations. Woods Hutchinson, Portland, Ore.

The Systemic Value of Radical Changes in Diet. Russell H. Chittenden, New Haven, Conn.

Hydrastis; Some of Its Therapeutic Uses. W. Blair Stewart, Atlantic City, N. J.

The Therapy of Arsenic. Harold N. Moyer, Chicago.

Apocynum Cannabinum. Horatio C. Wood, Jr., Philadelphia.

The Rational Application and Value of Specific Treatment for Tuberculosis. Edward R. Baldwin, Saranac Lake, N. Y.

The Origin and Treatment of Edema. Egbert Le Fevre, New York City.

Etiology and Treatment of Recurrent Headache. Gustavus Eliot, New Haven, Conn.

The Present Status of Streptococcus and Tetanus Antitoxin Injections. Victor C. Vaughan, Ann Arbor, Mich.

SYMPOSIUM ON PNEUMONIA.

Its Increase and the Measures for Its Prevention. Nathan S. Davis, Jr., Chicago.

The Value of Internal Medication and of External Local Applications. George Dock, Ann Arbor, Mich.

The Prevention and Management of Cardiac Failure. Solomon Solis-Cohen, Philadelphia.

The Value of Serum Treatment. John M. Anders, Philadelphia.

The Physical and Psychic Effects of Hydrotherapy. George F. Butler, Alma, Mich.

The Therapeutic Value of Massage in Acute Disease. Jay W. Seaver, New Haven, Conn.

The Action of Drugs on the Skin. Ralph A. McDonnell, New Haven.

The Year's Progress in Actinotherapy. William S. Gotthell, New York.

Pharmacodynamics from the Viewpoint of Osmology and an Outline of a System of Osmotherapy. Heinrich Stern, New York.

Section on Pathology and Physiology.

Chairman, Jos. McFarland, Philadelphia; Secretary, Henry A. Christian, Boston.

Chairman's Address: The Relation of the Section on Pathology and Physiology to the Other Sections of the Association. Jos. McFarland, Philadelphia.

Antistreptococcus Serum. D. H. Bergey, Philadelphia.

Bone Cysts; the Benign and Adamantine Dentigerous Cysts of the Jaw and Benign Cysts of the Long Pipe Bones. Joseph C. Bloodgood, Baltimore.

Early Acute Pancreatitis Without Hemorrhage; Report of a Case. H. H. Germain and Henry A. Christian, Boston.

The Pelvic Ureteral Sheath and Its Relation to Diseased Conditions in the Pelvis. John A. Sampson, Baltimore.

Chylous Ascites. L. Napoleon Boston, Philadelphia.

The Nature and Significance of Leucocytosis. A. M. Holmes, Denver.

The Pathologic Histology of Adipose Tissue. Henry A. Christian, Boston.

Vaccine: (a) The Development of Vaccine on Various Animals. (b) The Action of Various Drugs on Vaccine. (c) Attempts to Grow the Vaccine Organism. (d) Attempts to Identify the Vaccine Organism. C. T. McClintock, Detroit.

The Involvement of the Brain in Necrosis of the Temporal Bone. L. W. Dean, Iowa City, Iowa.

The Passage of the Different Foodstuffs from the Stomach. W. B. Cannon, Boston.

Further Observations on Leucocytotoxins. Henry A. Christian and Thomas F. Leen, Boston.

Extensive Thrombosis of the Sinuses of the Cerebral Dura, with Report of Two Cases. William G. Spiller, Philadelphia.

Anatomy of Bartholin's Glands; Cysts of Bartholin's Glands. T. S. Cullen, Baltimore.

Factors Causing the Migration of the Lymphocytes; a Contribution to the Physical Chemistry of the Leucocytes. Wilhelm Becker, Milwaukee.

A Hitherto Undescribed Intestinal Parasite of Man. Allen J. Smith, Philadelphia.

Regenerative Changes in Cirrhosis of the Liver. W. G. MacCallum, Baltimore.

Will the Long Continued Administration of Digitalis Induce Cardiac Hypertrophy? Frank B. Wynn, Indianapolis.

Secondary Manifestations of Hypernephroma. Walter L. Bierring and Henry Albert, Iowa City, Iowa.

Further Studies on Bacterial Intracellular Toxins. Victor C. Vaughan, Ann Arbor, Mich.

The Physiologic Significance of Chest Contours. Winfield S. Hall and F. F. Malone, Chicago.

The Influence of Posture on Blood Pressure and on the Pulse Rate. O. Z. Stevens and Winfield S. Hall, Chicago.

A Problem in Nutrition. L. Breisacher, Detroit.

The Physiology of the Middle Ear. J. Hollinger, Chicago.

New Experiments in Physiologic Optics. Winfield S. Hall, Chicago.

Observations on Motor and Sensory Localization of the Human Cortex. Harvey Cushing, Baltimore.

A Case of Sarcoma Arising in the Region of the Pancreas, with Special Reference to the Metastases. Granville Y. Rusk, New York City.

The Pathologic Physiology of Diabetes. Graham Lusk, New York City.

The Effects of Bloodletting on Metabolism. William J. Gies, New York City.

The Character of the Chromatophores. Leo Loeb, Philadelphia.

Uncinariasis in the South, with Special Reference to Mode of Infection. Claude A. Smith, Atlanta, Ga.

Clinical and Experimental Studies on Blood-Plates. Joseph H. Pratt, Boston.

A Bacteriologic and Clinical Investigation of a Curative Serum for Typhoid Fever. John S. Fulton, Baltimore.

Malignant Endotracheal Tumor Simulating Aneurism. Judson Daland and Jos. McFarland, Philadelphia.

Borated Food as a Cause of Kidney Lesions. Charles Harrington, Boston.

PHILADELPHIA CLINICS AND DEMONSTRATIONS.

COMPLIMENTARY TO THE MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION FOR THE WEEK PRECEDING AND THE WEEK FOLLOWING THE ATLANTIC CITY SESSION.

The profession of Philadelphia has arranged special clinics, lectures, demonstrations, etc., for members of the American Medical Association attending the Atlantic City Session. These are not to conflict with the Association work but are to precede and to follow. The schedule is given below. Dr. De Forest Willard, 1818 Chestnut Street, chairman of the committee on clinics, writes that the physicians of Philadelphia will be glad to do everything that lies in their power to make the visit of their fellow members of the Association interesting and satisfactory.

Buffet lunch will be served in the dining hall of the University Hospital each day to all members.

Dr. John B. Roberts will entertain the members of the American Medical Association and the members of the American Academy of Medicine at luncheon, at 313 S. 17th Street, Friday, June 3, at 2 p. m.

University of Pennsylvania Clinics and Demonstrations at the University Hospital.

Thirty-sixth and Spruce Streets.

FRIDAY, JUNE 3.

Edsall.—Demonstrations of the Methods Employed in the Analysis of the Gastric Contents. 11 a. m., Medical Amphitheater.
Steele.—Diagnosis and Treatment of Diseases of the Stomach. 12 m., Medical Amphitheater.
Fussell.—Exhibition of Cases of Heart Disease with Special Reference to Myocarditis. 1 p. m., Medical Amphitheater.
Luncheon.—University Hospital. 2 p. m.
Randall.—Stereoptican Demonstration of the Clinical Anatomy of the Tympanic Cavity. 3 p. m., Medical Amphitheater.

SATURDAY, JUNE 4.

Smith, A. J.—Demonstrations of Autopsy Technic and of Pathologic Specimens. 10 a. m. to 12 m., Medical Hall.
Tyson.—Medical Clinic. 12 m., Medical Amphitheater.
Anspach.—Demonstrations of a Series of Natural Color Preparations Illustrating the Value of Routine Histologic Examination of Gynecologic Specimens. 1 p. m., Gynecologic Amphitheater, University Hospital.
Luncheon.—University Hospital. 2 p. m.
Clark.—Gynecologic Clinic. 3 p. m., Gynecologic Amphitheater.

MONDAY, JUNE 6.

Muller.—Pathology of the Pancreas. 10 a. m., University Hospital.
Edsall.—Diagnosis and Treatment of Diseases of Liver. 11 a. m., Medical Amphitheater.
Young.—The Surgery of Paralyses. 12 m., Orthopedic Amphitheater.
Mills.—Some of the Newer Aspects and Methods of Cerebral Localisation. 1 p. m., Medical Amphitheater.
Luncheon.—University Hospital. 2 p. m.
Spiller.—Tumors of the Brain. 3 p. m., Surgical Amphitheater.
Frazier.—Surgery of Brain Tumors. 4 p. m., Surgical Amphitheater.
NOTE: Subject of lectures by Drs. Mills, Spiller and Frazier will be Brain Tumors. Each lecturer will discuss or demonstrate a different phase of the subject, so that there will be no repetition.

FRIDAY, JUNE 10.

Opening Exercises of the New Medical Laboratories. 4 p. m.

SATURDAY, JUNE 11.

Allis.—Congenital Dislocation of the Hip. A demonstration on the cadaver, in which both hips will be simultaneously dislocated by a force simulating routine contractions, with brief remarks on the etiology, diagnosis and treatment. 9 to 11 a. m.
Willard.—Treatment of Congenital Dislocation of the Hip. 11 a. m., Orthopedic Amphitheater.
Clinics will close in time for those who so desire to take the 1:20 train for Washington to witness the unveiling of the Rush monument.

MONDAY, JUNE 13.

Evans.—Serum Diagnosis of Typhoid and Other Infectious Fevers. The Precipitins and Their Medicolegal Value. 10 a. m., University Hospital.
Sailer.—Application of the Roentgen Ray in the Diagnosis of Thoracic Diseases. 11 a. m., University Hospital.
Stengel.—Practical Demonstrations of Methods Used in the Diagnosis and Treatment of Valvular Heart Disease and Arteriosclerosis. 12 m., Clinical Amphitheater.
Hirst.—Plastic and Abdominal Surgery for Complications and Consequences of Childbirth. 1 p. m., Maternity Amphitheater.
Luncheon.—University Hospital. 2 p. m.
De Schweinitz.—Ophthalmologic Clinic, with Special References to Ocular Traumatisms. 3 p. m., Gynecologic Amphitheater.
Shumway.—Lantern Demonstration on the Embryology of the Eye. 4 p. m., University Hospital.

TUESDAY, JUNE 14.

Stanton.—Demonstration and Application of the Methods of Determining Blood Pressure. 10 a. m., Medical Amphitheater.
Griffith.—Pediatric Clinic. 11 a. m., Medical Amphitheater.
Musser.—Medical Clinic. 12 m., Surgical Amphitheater.
Martin.—Surgical Clinic. 1 p. m., Surgical Amphitheater.
Luncheon.—University Hospital. 2 p. m.
Piersol.—Demonstrations of Monstrosities. 3 p. m., Medical Hall.
Pancoast.—The Relative Results Obtained with the Roentgen Ray and Radium in the Treatment of Carcinoma and Other Lesions. 4 p. m., Surgical Amphitheater.

Clinics and Demonstrations at the Jefferson Medical College and Hospital.

Tenth and Walnut Streets.

TUESDAY, MAY 31.

Brick, J. Colea.—Rectal Clinic. 9:30 to 10:30 a. m., Hospital Amphitheater.
Roe, W. J.—Oral Clinic. 11 a. m. to 12:30 m., Hospital Amphitheater.
Stewart, Francis T., Surgical Clinic. 2:30 to 4 p. m., Hospital Amphitheater.

WEDNESDAY, JUNE 1.

Jones, W. S.—Laryngologic Clinic. 10 to 11 a. m., Hospital Amphitheater.
Bland, P. Brooke.—Pathology of Certain Pelvic Organs with Lantern Demonstrations. 11 a. m. to 1 p. m., College Building.
Montgomery, E. E.—Gynecologic Clinic. 1 to 3 p. m., Hospital Amphitheater.
Coplin, W. M. L.—Insects and Lower Animals as Carriers of Contagion. 4 p. m., College Lecture Room.

THURSDAY, JUNE 2.

Pathologic and Histologic Laboratories. Demonstrations by Drs. Ellis and Radasch. 9:30 to 11 a. m., College Building.
DaCosta, Jr., J. C.—Recent Advances in Diagnosis by Examination of the Blood. 11 a. m. to 12 m., Hospital Amphitheater.
Cohen, S. S.—Clinical Lecture Illustrating Recent Advances in Medical Diagnosis. 12 to 1 p. m., Hospital Amphitheater.
Horwitz, Orville.—Genito-Urinary Clinic. 2 to 3:30 p. m., Hospital Amphitheater.
Davis, Edward P.—Modern Obstetric Surgery. 4 p. m., Maternity Building, 224 S. Seventh St.

FRIDAY, JUNE 3.

Bacteriologic Laboratory. Demonstrations by Dr. Rosenberger. 9 to 10:30 a. m., College Building.
Kyle, D. Braden.—Laryngologic Clinic. 10:30 to 11:30 a. m., Hospital Amphitheater.
Brubaker, A. P.—Demonstrations in Physiologic Laboratory. 11:30 a. m. to 1 p. m., College Building.
Spencer, Geo. W.—Surgical Clinic. 1 to 2:30 p. m., Hospital Amphitheater.
Graham, S. E.—Typhoid Fever in Infancy and Early Childhood. 3 to 4 p. m., College Building.
Hansell, Howard F.—Ophthalmologic Clinic. 4 p. m., Hospital Amphitheater.

SATURDAY, JUNE 4.

Brubaker, A. P.—Demonstrations in Physiologic Laboratory. 9 to 10 a. m., College Building.
DaCosta, J. C.—Gynecologic Clinic. 10 a. m. to 12 m., Hospital Amphitheater.
Hearn, W. Joseph.—Surgical Clinic. 1:30 to 3:30 p. m., Hospital Amphitheater.
Davis, Edward P.—The Preventive Treatment of Eclampsia. 4 p. m., Maternity Building, 224 S. Seventh St.

MONDAY, JUNE 6.

Wilson, H. A., and Professor Hoffa of Berlin.—Orthopedic Clinic. 9:30 a. m. to 12 m., Hospital Amphitheater.
Keen, W. W.—Surgical Clinic. 1 to 3:30 p. m., Hospital Amphitheater.
Fisher, John M.—Gynecologic Clinic. 4 p. m., Hospital Amphitheater.
Hansell, Howard F.—Ophthalmologic Clinic. 4 p. m., Philadelphia Hospital, Thirty-fourth and Spruce Sts.

SATURDAY, JUNE 11.

Fisher, John M., 9 to 10 a. m.; Montgomery, E. E., 10 to 11 a. m.; DaCosta, J. C., 11 a. m. to 12 m., Gynecologic Clinics. Hospital Amphitheater.

MONDAY, JUNE 13.

Pathologic and Histologic Laboratories. Demonstrations by Drs. Ellis and Radasch. 9 to 10 a. m., College Building.
Rugh, J. T.—Treatment of Ankylosed Joints. 10 to 11:30 a. m., Hospital Amphitheater.
Dercum, F. X.—Neurologic Clinic. 12 to 1 p. m., Hospital Amphitheater.
Stelwagon, Henry W.—Dermatologic Clinic. 1 to 2 p. m., College Building.
Metheny, S. A. S.—X-Ray Demonstrations. 3 to 4 p. m., Hospital Amphitheater.
Roe, W. J.—Oral Clinic. 4:30 to 5:30 p. m. Hospital Amphitheater.

V 4
190

TUESDAY, JUNE 14.

Brubaker, A. P.—Demonstrations in Physiological Laboratory. 9 to 11 a. m., College Building.
Cohen, S. S.—Medical Clinic. 11 a. m. to 12 m., Hospital Amphitheater.
Brick, J. Coles.—Rectal Clinic. 12 to 1 p. m., Hospital Amphitheater.
Spencer, Geo. W.—Surgical Clinic. 2 to 3 p. m., Hospital Amphitheater.
Stewart, Francis T.—Surgical Clinic. 3 to 4 p. m., Hospital Amphitheater.
Hansell, Howard F.—Demonstrations of the Changes in the Fundus of Eye in Bright's Disease. 4 to 6 p. m., Philadelphia Hospital, Thirty-fourth and Spruce Sts.

Clinics at the Medico-Chirurgical Hospital.

Cherry Street, Seventeenth to Eighteenth Street.

THURSDAY, JUNE 2.

Mann, James P.—Orthopedic Clinic. 11 a. m. to 12 m.
Christian, H. M.—Genito-Urinary Clinic. 12 m. to 1 p. m.
Gleason, Edward B.—Otologic Clinic. 3 p. m. to 4 p. m.

FRIDAY, JUNE 3.

Rodman, William L.—Surgical Clinic. 10 a. m. to 11 a. m.
Shoemaker, John V.—Dermatologic Clinic. 11 a. m. to 12 m.
Anders, James M.—Medical Clinic. 12 m. to 1 p. m.
Mann, James P.—Orthopedic Clinic. 3 p. m. to 4 p. m.

SATURDAY JUNE 4.

Ashton, W. Easterly.—Gynecologic Clinic. 10 a. m. to 11 a. m.
La Place, Ernest.—Surgical Clinic. 11 a. m. to 12 m.
Boyd, George M.—Obstetric Clinic. 12 m. to 1 p. m.
Rodman, William L.—Surgical Clinic. 3 p. m. to 4 p. m.

MONDAY, JUNE 6.

Pearce, F. Savary.—Neurologic Clinic. 10 a. m. to 11 a. m.
Haehnlen, W. Frank.—Obstetric Clinic. 11 a. m. to 12 m.
Fox, L. Webster.—Ophthalmologic Clinic. 12 m. to 1 p. m.
Daland, Judson.—Medical Clinic. 3 p. m. to 4 p. m.

SATURDAY, JUNE 11.

Pearce, F. Savary.—Neurologic Clinic. 9 a. m. to 10 a. m.
Ashton, W. Easterly.—Gynecologic Clinic. 10 a. m. to 11 a. m.
Anders, James M.—Medical Clinic. 11 a. m. to 12 m.

MONDAY JUNE 13.

Shoemaker, John V.—Applied Therapeutics Clinic. 10 a. m. to 11 a. m.
Haehnlen, W. Frank.—Obstetric Clinic. 11 a. m. to 12 m.
Cleveland, Arthur H.—Laryngologic Clinic. 12 m. to 1 p. m.
Daland, Judson.—Medical Clinic. 3 p. m. to 4 p. m.

TUESDAY, JUNE 14.

Hollopeter, W. C.—Pediatric Clinic. 10 a. m. to 11 a. m.
La Place, Ernest.—Surgical Clinic. 11 a. m. to 12 m.
Fox, L. Webster.—Ophthalmologic Clinic. 12 m. to 1 p. m.
Boyd, George M.—Obstetric Clinic. 3 p. m. to 4 p. m.

Polyclinic Hospital Clinics.

Lombard Street, Above Eighteenth.

MONDAY, MAY 30.

McKee.—Pediatrics Clinic. 10 a. m.
Stewart.—Surgical Clinic. 10 a. m.
Vansant.—Nose and Throat Clinic. 11 a. m.
Goepp.—Medical Clinic. 12 m.
Schamberg.—Dermatology. 12 m.
Packard. Ear Clinic. 1 p. m.
Watson.—Nose and Throat Clinic. 2 p. m.
Ashton.—Medical Clinic. 2 p. m.
Christian.—Genito-Urinary Clinic. 5 p. m.
Roberts.—Surgical Clinic. 5 p. m.

TUESDAY, MAY 31.

Hamill.—Pediatrics Clinic. 10 a. m.
Baldy.—Gynecologic Clinic. 10 a. m.
Steinbach.—Surgical Clinic. 11 a. m.
Gibb.—Nose and Throat Clinic. 11 a. m.
Eshner.—Medical Clinic. 12 m.
Schamberg.—Dermatology. 12 m.
Stout.—Ear Clinic. 1 p. m.
Baer.—Gynecologic Clinic. 2 p. m.
Young.—Orthopedic Clinic. 2 p. m.
Freeman.—Nose and Throat Clinic. 2 p. m.
Sailer.—Diseases of Stomach. 2 p. m.
Makuen.—Defects of Speech. 2 p. m.
Blocum.—Gynecologic Clinic. 5 p. m.
Riesman.—Medical Clinic. 5 p. m.

WEDNESDAY, JUNE 1.

McKee.—Pediatrics Clinic. 10 a. m.
Baldy.—Gynecologic Clinic. 10 a. m.
Vansant.—Nose and Throat Clinic. 11 a. m.
Goepp.—Medical Clinic. 12 m.
Schamberg.—Dermatology. 12 m.
Packard.—Ear Clinic. 1 p. m.
Watson.—Nose and Throat Clinic. 2 p. m.
Ashton.—Medical Clinic. 2 p. m.
Spiller.—Neurology. 3 p. m.
Christian.—Genito-Urinary Clinic. 4 p. m.

THURSDAY, JUNE 2.

Hamill.—Pediatrics. 10 a. m.
Adler.—Rectal Diseases. 11 a. m.
Gibb.—Nose and Throat. 11 a. m.
Eshner.—Medical Clinic. 12 m.
Schamberg.—Dermatology. 12 m.
Stout.—Ear Clinic. 1 p. m.
Young.—Orthopedic Clinic. 2 p. m.
Sailer.—Diseases of Stomach. 2 p. m.
Freeman.—Nose and Throat. 2 p. m.
Makuen.—Defects of Speech. 2 p. m.
Spiller.—Neurology. 3 p. m.
Riesman.—Medical Clinic. 5 p. m.

FRIDAY, JUNE 3.

McKee.—Pediatrics. 10 a. m.
Stewart.—Surgical Clinic. 10 a. m.
Vansant.—Nose and Throat. 11 a. m.
Goepp.—Medical Clinic. 12 m.
Schamberg.—Dermatology. 12 m.
Packard.—Ear Clinic. 1 p. m.
Baer.—Gynecologic Clinic. 2 p. m.
Watson.—Nose and Throat Clinic. 2 p. m.
Ashton.—Medical Clinic. 2 p. m.
Spiller.—Neurology. 3 p. m.
Christian.—Genito-Urinary. 4 p. m.
Blocum.—Gynecologic Clinic. 5 p. m.

SATURDAY, JUNE 4.

Hamill.—Pediatrics. 10 a. m.
Steinbach.—Surgical Clinic. 11 a. m.
Gibb.—Nose and Throat. 11 a. m.
Eshner.—Medical Clinic. 12 m.
Schamberg.—Dermatology. 12 m.
Stout.—Ear Clinic. 1 p. m.
Freeman.—Nose and Throat. 2 p. m.
Sailer.—Diseases of Stomach. 2 p. m.
Young.—Orthopedic Clinic. 2 p. m.
Makuen.—Defects of Speech. 2 p. m.
Spiller.—Neurology. 3 p. m.
Riesman.—Medical Clinic. 5 p. m.

Lectures at the Philadelphia Hospital.

Thirty-fourth and Pine Streets.

SATURDAY, JUNE 4.

Haehnlen, W. F.—9 a. m.
Allyn, H. B.—10 a. m.

MONDAY, JUNE 6.

Stengel, A.—10 a. m.
Cryer, M. H.—11 a. m.
Hansell, H. F.—4 p. m.

SATURDAY, JUNE 11.

Peck, E. L.—9 a. m.
Riesman, David.—10 a. m.
Martin, Edward.—11 a. m.

MONDAY, JUNE 13.

Spiller, Wm. G.—10 a. m.
Marshall, G. M.—11 a. m.
Potts, C. S.—3 p. m.
Hansell, H. F.—4 p. m.

Surgical Clinics at the German Hospital.

Girard and Corinthian Avenues.

Deaver.—June 1, 2, 4 and 14, 1 to 5 p. m.

Surgical Clinics at the Pennsylvania Hospital.

Eighth and Spruce Streets.

Harte.—June 4, 6 and 11, 11 a. m.

Society Proceedings.

COMING MEETINGS.

AMERICAN MEDICAL ASSOCIATION, ATLANTIC CITY, N. J., JUNE 7-10.
Arkansas Medical Society, Texarkana, May 3-5.
Louisiana State Medical Society, Lafayette, May 3-5.
Nebraska State Medical Society, Omaha, May 3-5.
Kansas Medical Society, Topeka, May 5-7.
Utah State Medical Society, Ogden, May 10-11.
Assn. of American Physicians, Washington, D. C., May 10-11.
West Virginia State Medical Association, Fairmont, May 10-11.
Oklahoma Territory Medical Society, Oklahoma City, May 11.
Illinois Medical Society, Bloomington, May 17-19.
State Medical Association of Missouri, St. Louis, May 17-19.
Montana State Medical Association, Butte, May 18.
Kentucky State Medical Association, Lexington, May 18-20.
Iowa State Medical Society, Des Moines, May 18-20.
Ohio State Medical Society, Cleveland, May 18-20.
Indiana State Medical Association, Indianapolis, May 19-20.
New Hampshire Medical Society, Concord, May 19 20.
American Gynecological Society, Boston, Mass., May 24.
North Dakota State Medical Society, Fargo, May 25-26.
Connecticut Medical Society, New Haven, May 25-26.
Michigan State Medical Society, Grand Rapids, May 25-27.
Amer. Laryn., Rhin., and Otol. Society, Chicago, May 30-June 2.

American Medico-Psychological Association, St. Louis, May 30-June 3.
Medical Society of the State of North Carolina, Raleigh, June 1.
South Dakota State Medical Association, Redfield, June 1-2.
Maine Medical Association, Portland, June 1-3.
International Assn. of Railway Surgeons, Chicago, June 1-3.
Minnesota State Medical Society, Minneapolis, June 2-3.
American Therapeutic Society, New York City, June 2-4.
American Dermatological Association, Niagara Falls, June 2-4.
Rhode Island Medical Society, Providence, June 3.
Conf. of State and Prov. Bds. of Health of N. A., Wash., June 3-4.
Indian Territory Medical Association, Holdenville, June 3-5.
American Academy of Medicine, Atlantic City, June 4-6.
Medical Society of New Jersey, Atlantic City, June 4-7.
Nat. Conf. State Med. Exam. and Lic. Bds., Atlantic City, June 6.
American Medical Editors' Association, Atlantic City, June 6.
American Gastro-Enterological Association, Atlantic City, June 6.
Association of American Medical Colleges, Atlantic City, June 7.
Massachusetts Medical Society, Boston, June 7-8.
American Orthopedic Association, Atlantic City, June 7-9.
American Urological Association, Atlantic City, June 10-11.
Medical Society of Delaware, Lewes, June 14.
Wisconsin State Medical Society, Milwaukee, June 22.

THIRTY-THIRD GERMAN CONGRESS OF SURGERY.

Held at Berlin, April 6-9, 1904.

The President, Professor Braun of Göttingen, in the Chair.

The Pneumatic Cabinet for Operations in the Thorax.

The chief interest at the congress centered in the Sauerbruch air chamber, more fully described in another column, page 1192. The box used as an air chamber had been brought to the congress and its workings were demonstrated. Experiments with over-pressure in the bronchi induced through a tracheotomy opening were well tolerated by animals, but Sauerbruch and Mikuliez doubt whether the human heart would stand the strain of such a procedure. They have established by their research that the principal cause of the danger in case of pneumothorax is not so much the collapse of the lung as the dilatation of the vessels of the collapsed lung. This diverts the blood from the other lung, and, although the latter is functioning normally, as it does not receive sufficient blood, asphyxia is inevitable. Nervous influences also co-operate. The air chamber obviates also some of the difficulties in operating on the esophagus. The cardiac end of the stomach and of the esophagus can be drawn well up into the pleural cavity after detaching them from the diaphragm, and after resection the stump of the esophagus can be implanted in the stomach. The stomach in a dog was drawn up and sutured at this point, and the animal has shown no disturbances during the six weeks since. Another lived four weeks after resection and suture. The sutured esophagus and stomach can be pushed back into their normal place. When this is desired the thoracotomy is best done in the fifth or sixth interspace. The third to the fifth interspace is best adapted for intervention on the upper part of the esophagus. The traction at this point is so great that it is doubtful whether a suture would hold after resection. Mikuliez experimented by tying the ends of each stump and pushing them both out of sight, suturing the wound over them in tiers. The upper stump was then exposed through another incision above and fastened to the skin above the second interspace. The aim sought in this "surgery of the future" is to supply an artificial passageway for the food to pass from the throat into the fistula opening into the stomach, the gap being bridged by some prothesis. The air chamber was applied in the clinic in a case of resection of the esophagus, but the very weak patient succumbed to heart collapse. It was found in this case that the necessary minus atmospheric pressure was 12 mm. The Brauer modification of the air chamber consists in a small box to enclose the head of the subject to be operated on. The anesthetist stands outside and conducts the narcosis with his arms alone in the box, supplying the patient with oxygen plus chloroform. Petersen has still further modified the air chamber by making it double, one for inspiration and one for expiration. He has found that varying the pressure in the lungs exerted a powerful stimulant effect on the heart. He was able to revive animals after complete arrest of the heart. In addition to this, the transient collapse of the lung obtained by suspending the over-pressure for a moment, enables it to be palpated as never before. He applied this new method in resecting a sarcoma of the spine, encroaching on the thorax. The operation was successful, but the over-pressure was not reapplied during the tamponing later, and pneumothorax developed, the patient dying at once. He found that a difference of pressure of only 7 mm. was sufficient to avert collapse of the lungs.

Hepatopexy.

Mayer reported 6 cases of hepatopexy done by Depage of Brussels. He incises below the costal arch and detaches a strip of peritoneum 5 cm. wide, leaving it in contact with the upper lip of the wound. It is folded back on itself and sutured to the posterior aspect of the margin of the liver. All pains from the displaced liver vanish at once and permanently. He thinks that hepatoptosis is frequently overlooked. Franke of Brunswick employs a similar method of hepatopexy, but assures a firmer hold by passing a few sutures directly through the liver tissue.

Ablation of Tumors in Throat.

Gluck of Berlin stated that he now has a record of 9 cases treated by complete ablation of both larynx and pharynx from the base of the tongue to the entrance of the thorax. The esophagus is substituted by a canula, with which the patient is able to swallow without difficulty. The artificial larynx allows intelligible speech. All his 9 patients have been permanently cured to date.

Tendon Transplantation.

Hoffa exhibited a few patients to illustrate the benefits derived from tendon transplantation in his 100 operations. He thinks that a pink tint in the muscle is not indispensable, although desirable. He also mentioned the necessity for maintaining a certain amount of tension in the transplanted tendon. Even if the paralysis is beyond hope of restitution, transplantation of the tendons will enable the subject to discard mechanical support.

Five New Operations on Biliary Passages.

Kehr of Halberstadt has not been able to find in the literature any record of operations similar to five he has performed during the last year. One was a ligature of the hepatic artery for aneurism; one was the direct implantation of the hepatic duct in the duodenum; one was an operation on the common bile duct, which required complete exclusion of the duodenum. Both ends were tied and gastroenterostomy done. In the fourth operation a pancreatic cyst was made to open directly into the gall bladder, and the latter in the stomach, near the pylorus. All these patients recovered. This makes the fourteenth case in which he has made the gall bladder open into the stomach. In the fifth novel operation hepato-cholangio-enterostomy was done. The patient has since died, but no particulars are known after she left the hospital the fifth week in good condition. Enderlen of Marburg remarked that he had never been able to obtain a permanent communication between the intrahepatic biliary passages and the intestine. The temporary opening always healed over later. He, with others, thinks that the common bile duct in Kehr's case probably regained its permeability.

Radiotherapy of Cancer.

A number of communications on this subject were presented, Perthes of Leipsic reporting 29 cases of cancer treated with the Röntgen rays. He denies that they have any action below a depth of 2 or 3 cm. Lassar interrupts treatment as soon as a dermatitis becomes apparent. Jordan of Heidelberg thinks that recurrence of cancer takes the form of the original growth. It appears early when the latter was of rapid growth, while it may not develop for many years in case of a slowly growing neoplasm. In this connection we call attention to a new mode of measuring the force and penetrability of the Röntgen rays, not announced until two days after the congress, by L. Freund of Vienna. It is based on the chemical action of the rays on a colored fluid, a chemically pure 2 per cent. solution of iodin in pure chloroform, prepared and kept away from the light. The

sensibility of this fluid to the Röntgen rays is such that a three-minutes' exposure alters the tint considerably, as the rays oxidate the iodin and liberate it. The color changes are much more sensitive than with the chromoradiometers hitherto used, while they afford an exact chemical measure of the power of the rays.

TENNESSEE STATE MEDICAL ASSOCIATION.

Seventy-first Annual Session, held at Chattanooga, April 12 to 14, 1904.

(*Concluded from page 1095.*)

Membranous Croup and Diphtheria.

DR. J. T. HERRON, Jackson, reported nine cases of membranous croup, in all of which he had used antitoxin with very beneficial results. He believes that if antitoxin were given early and in large doses, there would be very little need for either intubation or tracheotomy.

DR. J. B. WITHERINGTON, Mumford, gave a résumé of cases treated with antitoxin. In all his professional career, he said, he had never used any remedy for any disease that gave him such uniformly satisfactory results as antitoxin in the early stages of diphtheria.

DISCUSSION.

Drs. Frank Trestor Smith, J. A. Crook, William S. Scott, C. P. Fox, J. S. Nowlin and Louis Leroy concurred in the main with the essayists and spoke of having obtained gratifying results from the use of antitoxin.

Chronic Dysentery—A Protest.

DR. A. B. COOK, Nashville, wished the term "chronic dysentery" to be dropped from the medical vocabulary. He emphasized the following points: 1. Almost without exception the condition so named is purely local. 2. The term chronic dysentery, as ordinarily employed, does not and can not refer to a definite pathologic entity, but rather covers a wide variety of local diseases in no way related to dysentery. 3. A chronic discharge from the bowels, unattended by the well-recognized symptoms of a general systemic disease process, always indicates a lesion of the rectum, sigmoid or colon. 4. The idea of a necessary relation between bloody discharges and chronic dysentery is based on a false assumption and should be both abandoned and forgotten.

Abscess of the Brain.

DR. W. A. BRYAN, Nashville, reported an interesting case, and emphasized the following statements: 1. Cerebral abscess is to be considered chronic after it has been present six weeks. It requires that time for the formation of the so-called pyogenic membrane, which is nothing more than a fibrous limiting wall. 2. A chronic brain abscess may last indefinitely. Cases are reported varying in duration from a few weeks to as much as twenty years. 3. Chronic abscess of the brain may remain confined within the limiting wall indefinitely, causing few or no symptoms, and by extension through the fibrous wall involve the meninges or rupture into a ventricle, producing marked secondary symptoms and early death. 4. Brain abscess frequently follows an otitis media, without evidence of mastoid disease, and might do so, as in his case, even when the cells are completely necrotic. 5. It may result from otitis by direct extension, by large necrotic involvement of the bone, or by thrombophlebitis. 6. Pus from brain abscess is thin, viscid, like synovial fluid, and acid. 7. The most important symptoms, aside from peripheral disturbances, are pain, mental bebetude, subnormal temperature, slow pulse, and vomiting. 8. Increase in temperature above normal signifies either a new involvement of brain tissue or inflammation of the meninges. The latter is usually accompanied by chill. 9. Congestion of the veins of the fundus may be greater on the sound than it is on the diseased side.

Holocain.

DR. FRANK TRESTOR SMITH, Chattanooga, said that holocain solutions may be sterilized by boiling without affecting the drug; it produces no abrasion of the corneal epithelium, and does not interfere with healing of the mucous membrane; it has no effect on the circulation, neither causing anemia, as does cocain, nor hyperemia, as does eucain, and it does not affect the pupil, the accommodation, nor the tension of the eye. He therefore believes it to be the best local anesthetic for general use, and that it should supersede cocain almost entirely.

Conservative Surgery of the Hand.

DR. PAUL F. EVE, Nashville, cited cases which illustrated in a striking manner what can be accomplished by conservative surgery of the hand. In the treatment of the various wounds of the hand, he said every attention should be paid to thorough cleansing and drainage, and no wound should be thought too trivial to receive proper attention. Many a hand has been rendered partially or wholly useless by the improper treatment of injuries.

Present Status of the Etiology of Malignant Growths.

DR. RAYMOND WALLACE, Chattanooga, stated that inasmuch as the dividing line between various neoplasms is so difficult to determine, and the transition from a non-malignant to a malignant growth depends on such apparently slight causes; that contrary to all infectious conditions which might be considered analogous, there has never been recorded a case of malignancy in the new-born, and exceedingly few cases in childhood, which also militates against any theory of direct heredity; a multiplex and varying etiology seems the most plausible. Intrinsic irritation of the cell proliferating mechanism in the nucleus may, with the advance of cell chemistry, yield certain autogenous factors, but the following may be summarized as extrinsic factors; Various physical, chemical or physiologic irritations and irritations caused by parasitic life, any of which cause an evident disturbance in cell proliferation, which leads to abnormal proliferation and the consequent formation of neoplastic growths. The degree of malignancy depends on the rate and type of proliferation, and the loss of function and consequent reversion of type in the proliferating cells attest the theory of nuclear or chromatin alteration or rearrangement.

Visual Inspection of Railway Employes.

DR. C. M. CAPPS, Knoxville, urged that railway companies should realize the importance of having a competent inspector for each railroad division, as a means of more economic management.

The Treatment of Puerperal Infection.

DR. J. T. ALTMAN, Nashville, urged the importance of more careful prophylaxis. Since the advent of bacteriology, the true cause and pathology of puerperal infection has been settled, and entirely new ideas of treatment advanced, which, he thought, was a decided step forward in the management of the severer types of this disastrous condition. Surgical treatment is not satisfactory.

Venereal Disease and the Social Order.

DR. O. J. PORTER, Columbia, discussed this subject at great length, and concluded that earlier marriages would prove a telling factor among the agencies which tend to lessen the prevalence of venereal diseases.

After-Treatment of Abdominal Section.

DR. L. E. BUNCH, Nashville, emphasized the avoidance of opium and the early movement of the bowels in desperate cases in the after-treatment of abdominal sections; also the absence of all relatives and friends from the sick-room until the crisis has passed; the administration of water in almost satisfying quantities from the first; the early propping up in bed, especially in old people; the avoidance of milk as a diet until the sixth day, and last but not least, the use of a saline enema at the completion of every abdominal operation, for the relief of thirst.

Internal Antisepsis in Typhoid Fever.

DR. J. A. CROOK, Jackson, advocated the principle of drainage and antisepsis as the important features in the treatment of typhoid fever, and reported his successful experience in the use of carbonate of guaiacol combined with thymol, menthol

and eucalyptol, as internal antiseptics in this malady. While many of the prominent members of the profession had denied the possibility of intestinal antisepsis with any drug or combination of drugs, yet the clinical experience of hundreds who had used intestinal antisepsis proved that the bowel may be rendered practically sterile. Some of these clinical reports the author quoted. In most instances the diagnosis was established by the Widal test and diazo-reaction. Acetozone was mentioned as a valuable remedy in this disease, and testimony given in favor of its use.

Sanitary Advances.

DR. E. H. JONES, Murfreesboro, said that American sanitary measures and precautions make it possible to inhabit the jungles of our new island possessions, without which the death-dealing enemies to the human organism would devastate our armies, prospectors and speculators. He believes that the much-contended-for army canteen does not add to, but rather depreciates, the resisting forces in combating the prevailing maladies incident to tropical climes.

Tetanus.

DR. T. J. HAPPEL, Trenton, referred to the exhaustive review of this subject, which was published in THE JOURNAL, Aug. 29, 1903, after which he reported three cases in which he obtained good results from the use of calabar bean. He said that Shoemaker calls the calabar bean a curative agent of great value in tetanus, and that under its use in full doses, pressed to its physiologic effects, fully one-half the cases recover.

Other Papers Read.

DR. W. D. HAGGARD, Nashville, reported a case of gallstone in the common duct, one of cyst in the kidney, a case of cancer of the umbilicus, a fibromyoma of the uterus, and tubercular ostitis of the femur, and exhibited specimens.

In a symposium on pneumonia Dr. Louis Leroy, Nashville, discussed the bacteriology and pathology; Dr. John A. Witherspoon, Nashville, the early diagnosis and semeiology; Dr. E. G. Wood, Nashville, medicinal treatment; Dr. Thomas L. Maddin, Nashville, general considerations; Dr. J. S. Cain, Nashville, the history and value of blood-letting; Dr. E. A. Cobleigh, Chattanooga, the local treatment, and Dr. C. P. McNab, Knoxville, some causes of error in the diagnosis of pulmonary affections and their explanation.

Papers were also read as follows:

"The Microscope in Diagnosis," by Dr. W. P. King, Lutts; "Inflammation and Ulceration of Sigmoid Flexure," by Dr. F. B. Kenger, Shelbyville; "Duties of the Profession Concerning Fanaticism, Frauds, Fools and Fads," by Dr. Y. L. Abernathy, Chattanooga; "The General Practitioner's Relation to Insanity and Its Management," by Dr. M. Campbell, Knoxville; "Hysteria," by Dr. J. W. McQuillan, Chattanooga; "Therapy of Sodium Chlorid," by Dr. J. S. Nowlin, Shelbyville; "La Grippe and Its Complications," by Dr. A. J. Swaney, Gallatin, and "Leucocytes in Typhoid Fever," by Dr. William Litterer, Nashville.

Therapeutics.

[Our readers are invited to send favorite prescriptions or outlines of treatment, such as have been tried and found useful, for publication in these columns. The writer's name must be attached, but it will be published or omitted as he may prefer. It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulae and outlines of treatment are answered in these columns without allusion to inquirer.]

Dysmenorrhea in Girls.

In cases of dysmenorrhea in girls who have mitral stenosis the *Jour. des Prac.* recommends moderate doses of digitalis and a suppository containing belladonna. The patient should be kept in bed. If there is excessive flow the following combination should be prescribed:

℞ Ergotin	gr. iss	09
Quin. sulph.	gr. 2/5	025
Pulv. digitalis fol.	gr. 1/5	012
Pulv. cocoæ q. s.		

M. Ft. capsula No. i. Sig.: Two to four capsules daily.

In some cases hydrastis and viburnum prunifolium may be substituted for the ergot combined in the following proportions:

℞ Tinct. hydrastis		
Ext. viburni prunifolii flu., aa	ʒii	8

M. Sig.: Ten drops every two hours.

Painting the nasal mucous membrane with cocain has been recommended to relieve the painful menstruation:

℞ Cocainæ hydrochlor.	gr. x	65
Aquæ destil. q. s. ad.	ʒss	15

M. Sig.: To be applied locally to the nasal mucous membrane until its anesthetic effects are produced.

Acne of the Face.

The following combination containing betulol (which is a methyl-oleo-salicylate comp.) is of service in the treatment of acne of the face:

℞ Betulol		
Ung. storacis, aa	gr. xv	1
Lanolini (anhydrous)	ʒv	20

M. Ft. unguentum. Sig.: Apply with friction every night for ten days, then stop for ten days and recommence the treatment.

Gallstones.

Hirtz, in the *Internat. Med. Annual*, considers it important that patients having a tendency to gallstones should take moderate exercise, and that women should not wear tight corsets. He thinks it of value to confine the patient to a milk diet at times, and to add Vichy water to the milk. When symptoms point to an attack the patient should be put to bed. In order to quiet the patient the author recommends hot baths, lasting from twenty-five minutes to one hour, and the application to the painful region of poultices containing laudanum, or hot compresses, or the following liniment:

℞ Tinct. opii	ʒvi	24
Spts. chloroformi	ʒi	4
Lin. camphoræ	ʒv	150

M. Ft. linimentum. Sig.: Apply locally.

At the same time the following combination should be given:

℞ Antipyrini	gr. xxx	2
Syr. codeinæ	ʒii	60
Aq. chloroformi	ʒiv	120

M. Sig.: One teaspoonful every half hour or hour while the pain lasts.

In other cases it is advisable to administer anodyne preparations by the bowel. The following rectal injection is of service in such cases:

℞ Antipyrini	gr. xv	1
Vini opii	gtt. xv	1
Aquæ (warm)	ʒiv	120

M. Sig.: Thoroughly cleanse the bowel and introduce this solution per rectum. Morphin will have to be given hypodermically in the violent crises. The kidneys at the same time should be carefully watched in order to prevent a deficient urinary flow. Between the attacks hot baths and hot compresses are to be applied to the region of the liver. The bowels are to be moved by rhubarb, cascara, or Carlsbad salts, and intestinal antisepsis maintained by the administration of sodium benzoate or salicylate, or combined as follows:

℞ Sodii benzoatis	ʒii	8
Sodii salicylatis	ʒiv	15

M. Ft. cap. No. 30. Sig.: One capsule three times a day. Internally olive oil is worth trying. Glycerin is also recommended, given in ½ to 1 ounce doses (15.-30.) during the period when the colic is most pronounced. Sodium glycocholate is also said to be of service in dissolving gallstones or preventing their formation, given in five-grain (30.) doses three times a day. As to the limits of medicinal treatment Taylor states that operation is not absolutely necessary unless: 1. The patient has suffered from repeated and exhausting attacks from colic.

2. Unless there are signs of suppuration in the biliary passages.

3. Unless there are signs of complete obstruction of the common bile duct. The following suggestions in regard to the time when operation is necessary have been offered by Kehr: In acute cholecystitis, in chronic obstruction of the common

duct, in those forms of colic in which the condition is grave and medicinal treatment unsuccessful, when there is an angiocholitis, or abscess of the liver, in cases of perforation and signs of peritonitis make their appearance.

Hemorrhoids.

The following combinations, serving as a palliative treatment of hemorrhoids, are recommended by *Centralbl. f. Ther.*:

B.	Pulv. opii	gr. i	06
	Plumbi acetatis		
	Ung. benzoatis, āā	gr. iii	20
	Butyr. cacao	gr. xxii	1 50

M. Ft. suppos. No. x. Sig.: One suppository to be inserted morning and evening; or:

B.	Spts. chloroformi	gtt. xxx	2
	Vitelli ovi unius		
	Aq. font. q. s. ad	℥iiiss	100

M. Ft. emulsio. Sig.: As an enema; or:

B.	Bismuthi iodid.	gr. x	65
	Zinci oxidi	gr. viii	50
	Balsami Peruv.	gr. iss	15
	Ceræ albæ	gr. iii	20
	Butyr. cacao	gr. xxii	1 50

M. Ft. suppos. No. x. Sig.: One suppository to be inserted morning and evening; or:

B.	Menthol	gr. xv	1
	Cocainæ	gr. xxx	2
	Ext. secal. cornut. flu.		
	Ext. hamamel. virg. flu., āā	℥ss	15

M. Sig.: Apply locally; or:

B.	Alphæ eucainæ	gr. ss	03
	Morph. muriatis	gr. 1/6	01
	Antipyrini	gr. viiss	50
	Aquæ destil.	℥v	20

M. Sig.: As an injection into the rectum; or:

B.	Ext. secal. cornut.	gr. iii	20
	Morph. muriatis	gr. 1/6	01
	Butyr. cacao	gr. xxii	1 50

M. Ft. suppos. No. x. Sig.: Insert one suppository morning and evening; or:

B.	Alumin.	gr. lxxv	5
	Liq. plumbi subacet.	gr. xv	1
	Olei olivæ	℥ss	2
	Lanolini	℥iss	45

M. Ft. unguentum. Sig.: To be applied locally night and morning after thoroughly cleansing the affected areas.

Gout.

A. P. Luff in *Ther. Rev.* states that gout is a metabolic autotoxemia, both intestinal and hepatic, which is followed by a deposition of sodium biurate in the joints and tissues.

In the treatment of gout, according to the author, each patient must be studied individually regarding his habits and mode of life. The treatment is divided as follows: 1. The treatment of the paroxysm and the speedy relief of pain.

2. The treatment of the subacute state and the prevention of the recurrence of attacks by promoting the elimination of uric acid and checking its formation through careful attention to diet and hygiene.

3. The treatment of the affected joints with the object of removing uratic deposits and preventing permanent deformity.

He treats the gouty paroxysm by slight elevation of the limb above the body, by warm pack to the joints and by arranging the bed clothing so they do not touch the part. The warm pack consists of cotton wool saturated with the following lotion and the whole covered with oil silk:

B.	Sod. carb.	℥iv	120
	Linimenti bellad.	℥ii	60
	Tinct. opii	℥iss	45
	Aquæ	℥viii	240

M. Ft. linimentum. Sig.: Apply locally by mixing a small quantity with an equal quantity of hot water. He speaks against leeching, blistering or incisions. Internally the wine of colchicum root is advised, as it reduces the inflammation, relieves the pain and shortens the attack, followed by a mixture of the colchicum with the citrate of potassium, grams 40-60 (2.65-4.00) three times a day. After the attack the colchicum should be left off gradually. Blue mass should be given to move the bowels, followed the next morning by Epsom salts. Chloral, sulphonal, trional or hyoscyamus may be given to produce sleep, but opium should be avoided. Alcohol should be given very sparingly, and only for a weak heart. Meats and beef extracts should be avoided. Between the paroxysms small doses of the resin of guaiac and colchicum are given combined with nux vomica and gentian. For the relief of constipation he advises sulphur or the compound licorice powder with occasional doses of blue mass.

The elimination of uric acid is promoted by the administration of the citrate or bicarbonate of potassium and by the use of as little table salt as possible. The potassium salts are superior to the sodium and lithium salts. Potassium iodid internally tends to lessen the inflammatory thickening of the fibrous structures of the joint, but no medicines will dissolve the sodium urate deposits.

Massage and hot baths are contraindicated in acute gout, but are of value in the chronic form. Meat should not be used more than once a day, but no one class of foods should be entirely excluded without studying the individual case. Intestinal fermentation and putrefaction should be avoided; starchy foods should be used sparingly. The choice of mineral water and mineral springs depends on the purpose for which it is chosen.

Medicolegal.

Visible Marks on Body—Delay in Applying for Autopsy.—The Fourth Appellate Division of the Supreme Court of New York had before it, in the case of Root vs. London Guarantee and Accident Co., a policy of insurance "against bodily injuries sustained wholly and exclusively through external violence occasioned accidentally by visible means," which further provided, "that this insurance does not cover injuries of which there is no visible mark on the body (the body itself in case of death not being deemed such mark)." The death of the insured was attributed by the physicians to angina pectoris, caused by a fall from his bicycle, in which he also fractured his right femur. But the physicians testified that the heart spasms were not attributable to the broken femur, and, as there was no visible mark on the back or chest, the company contended that the anginal pains, even though resulting from the accident, did not bring the case within the compass of the policy. The court, however, thinks this too narrow a construction to put on its language. It says that where it is plain that an accident has occurred, and severe injuries have resulted, and it is a fair deduction from the circumstances that death ensued as the direct consequence of such accident, the policy should be construed to hold the company liable, even though no contusions or marks appear on the body. A man may be killed by a blow over the heart, or by drowning, or by falling from a balloon, and death ensue before reaching the ground, and in each instance there may be no mark on the body, yet death is by accidental means, and should be within the purview of the policy. Furthermore, it says that the insured's pallor and emaciation and decline were apparent after the accident, and furnished visible signs of the injuries. Then, the insured having died on Sunday and been buried on Wednesday, a representative of the company knowing about the death the day after it occurred, the court holds that delay until Thursday, the day after the burial, in applying to have an autopsy performed was unreasonable.

Delaying Calling Physician to Treat Injuries to Eye.—The case of Robertson vs. Texas & Pacific Railway Co. was brought to recover for injuries from a red-hot cinder falling into the plaintiff's eye. There was a special plea of contributory negligence on his part, in not having his injuries properly treated by competent physicians until the injury was rendered more serious than it otherwise would have been. The main charge to the jury, the Court of Civil Appeals of Texas further says, contained the following: "If you should find that the plaintiff was injured by negligence on defendant's part, so as to entitle him to recover, but you should further find that the plaintiff was guilty of negli-

gence in delaying calling a physician and having his injuries treated, and that such negligence on his part aggravated his suffering, and increased his injuries and damages therefrom, you can not, in such case, allow anything for such increase of his injuries or damages, but can allow him for such damages as you find would have been sustained by him for his injuries, had he not been guilty of negligence in failing to obtain medical treatment for himself." Then there was the following special charge given the jury: "The law requires from one who receives an accident or injury to use the same degree of care and caution which a man of ordinary care and caution would use to lessen the effects of the accident, and make as light as practicable the injury. Therefore, you are instructed, if you believe from the evidence that a spark escaped from the engine pulling defendant's train on which plaintiff was riding, and struck him on or about the eye, and if you further believe from the evidence that plaintiff failed to give the same proper medical attention and treatment, and, in so failing, was wanting in ordinary care and prudence, and that the injury, if any, he received, was thus increased, aggravated, or made more difficult to cure, you are instructed that for such increase or aggravation of injury he can recover nothing, but that, if you allow him any damages, it will only be for such injury as would have been inflicted on him, if any, if he had used the same degree of care and prudence to have the same properly treated after the accident that a man of ordinary care and prudence would have used, if you believe from the evidence that he was wanting in such care." Complaint was made of the main charge and that the charges were conflicting and inconsistent. But the court says that the main charge was correct, and fairly submitted the issue of contributory negligence on the part of the plaintiff in failing to use ordinary care to have his injuries treated. It would have been proper to have refused any further instruction on this phase of the case. The special charge, however, did not wholly preclude a recovery by plaintiff, but sought to limit the recovery to "such damages as you find would have been sustained by him for his injuries, had he not been guilty of negligence in failing to obtain medical treatment for himself." The main charge was not so full as the special charge, but they were not inconsistent.

Status of Physician Not Wanted by Patient—Privilege.—The Court of Appeals of New York says, in the case of Meyer vs. Supreme Lodge Knights of Pythias, that the insured was *in extremis*, incapable of acting or deciding for himself, and, from the necessity of the case, any one was authorized to call a physician to treat him. Without his knowledge or consent, a physician was called for that purpose, and for that purpose alone he attended. He found the insured in bed in an upper room of a hotel, "suffering intense pain and vomiting." The insured told him to get out of the room—that he did not want him there—but he did not leave. He remained to treat him as a physician, and, in order to treat him intelligently, tried to find out what the matter was. From information from him, partly in answer to questions, and partly through voluntary disclosures, and from observation of the physical symptoms, he decided that it was a case of arsenical poisoning. Thus informed as to the nature of the disease, he at once administered a remedy, and soon followed it by another. The insured objected, and tried to curse him away from his bedside, but the physician, loyal to the instincts of his profession, refused to listen to the ravings of the would-be suicide, and continued to prescribe in order to relieve suffering and prolong life. The court holds that there was no error in not allowing the physician to disclose on the trial of this case the information acquired under these circumstances. It says that the question was whether there was enough evidence to warrant the trial judge in deciding, as a preliminary question of fact, that such information was acquired "in attending a patient, in a professional capacity," and that it "was necessary to enable him to act in that capacity." The witness was called as a physician, he attended as a physician, he made a diagnosis as a physician, and he administered remedies as a physician. In all that he did he acted in a professional capacity. While it was true that in all he did he acted against the will and in spite of the remonstrance of a man whose condition imperatively called for professional treatment, still the meeting was professional in nature, and all that he said or did was strictly in the line of his profession. Was the subject any less a patient, within the meaning and object of the statute, because he was forced to submit to ministrations designed to save his life? Was the doctor guilty of assault when he gave the hypodermic injection? Was he bound to leave him there to die, without an effort to help him? Was the statute designed to protect those only who are treated by consent, but not those treated through necessity? Does it not mean by a "patient" at least one who is consciously treated by a physician, even without his consent, when the facts tend to show that through bodily suffering his mind had partially lost its hold? Do our humane laws make it the duty of a physician to leave the bedside of a dying man, because he demands it, and, if he remains and relieves him by physical touch, hold him guilty of assault? Either this physician was the physician of the insured, or he committed an assault on him, and was guilty of a crime. If the wife of the insured had called the physician, she would have acted as an agent by implied authority. The bellboy who, in fact, called him, also acted on implied authority, and, when the physician came, the act of the agent in calling him, if subject to revocation in the actual case, would have been in the supposed case. While the physician in either case could have retired, if he remained in either he remained as a physician, the sick man being his patient, and he was acting in a professional capacity when, as a duly licensed physician, he actually treated the insured as a patient. When one who is sick unto death is in fact treated by a physician as a patient, even against his will, he becomes the patient of that physician, by operation of law. The same is true of one who is unconscious and unable to speak for himself. If the insured had been in a comatose state when the physician arrived, the existence of the professional relation could not be questioned. The relation of physician and patient, so far as the statute under consideration is concerned, springs from the fact of professional treatment, independent of the cause which led to such treatment. An examination made in order to prescribe establishes the same relation. So the court is of the opinion that the physician who treated the insured at the hotel occupied the same confidential relation to him as did the physicians at the hospital. The fact that the patient told the physician several times to let him alone, as he wished to die, expressing himself in a brutal and profane manner, did not negative the existence of the relation of physician and patient. The fact of treatment was the decisive test in this case. The statute impresses absolute secrecy on all knowledge acquired by a physician in a sickroom that is necessary to enable him to properly treat the sick person, whether the treatment be with or without his consent.

Current Medical Literature.

AMERICAN.

Titles marked with an asterisk (*) are abstracted below.

American Medicine, Philadelphia.

April 16.

1 *A Review of Literature Relating to Serum Diagnosis. Randle C. Rosenberger.
2 *Appendicitis: Its Relation to Pelvic Inflammation. J. M. Baldy.
3 *Resuscitation After Apparent Death in Chloroform Anesthesia; with a Report of Two Cases. Emil King.
4 *Case of Pemphigus Vulgaris, with Some Observations on Its Bacteriology. A. C. Eustis.
5 Blood Iron. Edward T. Williams.
6 Multiple Myeloma. George F. Zinninger.

1. **Serum Diagnosis.**—Rosenberger attempts to give only the more recent progress in serum diagnosis, and the details of technic are extensively enumerated from 137 communications on the subject in international literature. In summarizing he says that out of 17,280 cases of enteric fever, 16,352 gave positive reactions and 928 did not, leaving 94.6 per cent. positive. In paratyphoid fever 42 cases have been collated and in 40 of these—95.2 per cent.—a positive reaction was obtained. In tuberculosis 221 cases were enumerated, 194 of which, or 87.7 per cent., were positive. Of 390 cases of bacil-

lary dysentery, 318, or 80.2 per cent., gave positive reactions. In the other diseases only a small number have been reported, and hence no reasonable estimate can be given of the percentage of reactions obtainable.

2. **Appendicitis and Pelvic Inflammation.**—Baldy disbelieves in the causal relationship of appendicitis with pelvic inflammation. In his experience the two diseases are rarely associated, and then only as a coincidence. He has not found a single case in which, having found pus in the fallopian tube, he has found pus in the involved vermiform appendix, nor has he found pus in a tube or ovary complicating a perforated or gangrenous appendix.

3. **Chloroform Anesthesia.**—King particularly emphasizes the following points:

1. Deep anesthesia is always a condition of danger. Therefore every precaution must be taken to guard against danger.
2. When serious accident occurs we must have ready a well-matured plan of treatment which meets the indication in the best possible manner.
3. Death usually resulting from failure of the vital centers, the first indication is their stimulation. Artificial respiration, tongue traction and heart compression should be first tried. The application of cold, ether being poured on the abdomen according to Hare, inversion, suspension and succussion, dilation of the sphincter ani and electricity are worthy of trial if the others fail.
4. Hypodermic injections during the stage of collapse are a waste of time. The arterial pressure being nil there can be no effect from medication unless the injection be into the heart. They may do good before cardiac arrest or after the contractions are resumed, and then the remedies are limited to a few.
5. Injections of ether and alcohol in any form are apt to be harmful. Their effect in overdose is so similar to chloroform in their action on the vital centers that we only add to the danger by their use.
6. Mechanical efforts at resuscitation must not be so rough that internal organs are injured. That this is possible is proved by reported cases where the liver was torn, blood found in the pleura and the tongue wounded.
7. Since we can not know when the molecular changes separating true from seeming death take place our efforts at resuscitation should continue for at least one hour.

4. **Pemphigus Vulgaris.**—Rustis, after reporting a case, gives the results of inoculation and cultural experiments, as well as noticing the previous bacteriologic work in this line. He concludes that in cases of pemphigus a diplococcus can be isolated from the bullas, and when injected intravenously into a rabbit will cause death. A diplococcus removed from the rabbit's blood and identical with that obtained from a case of pemphigus, when injected into a pig, produced a pustular eruption in the latter animal, attended with mild constitutional disturbances. Arsenic is the main remedy to be relied on in the treatment of the disease.

Boston Medical and Surgical Journal.

April 7.

7 °Infectious Arthritis. Joel E. Goldthwait.
8 °Some Points on the Diagnosis and Treatment of Certain Neglected Minor Surgical Lesions. E. A. Codman.
9 °Radical Cure of Inguinal Hernia. John O'Conor.

April 14.

10 °Bilateral Facial Atrophy, with Report of a Case and Its Treatment by the Subcutaneous Injection of Paraffin. Benjamin T. Burley.
11 A Many-phased Case of Chorea. Horace E. Marion.
12 A Case of Huntington's Chorea; Its Social Aspects. J. J. Putnam.
13 °A New Treatment of Morphin Addiction. William S. Birge.

7. **Infectious Arthritis.**—By infectious arthritis Goldthwait designates a joint disease resulting from some infectious organism, usually occurring as a sequel of some other disease, with abrupt onset and acute symptoms, being in marked contrast in its progress with atrophic or rheumatoid arthritis. The result of the infection, of course, depends on the more or less dangerous character of the organism. The condition of the blood, lymphatics, urine, etc., are noted. Cases are reported illustrating the different types.

8. **Minor Surgical Lesions.**—In his paper Codman confines himself to minor injuries of the wrist, shoulder and ankle, but remarks that the principles apply to other joints. He says one is astonished to find how often the presence of ecchymosis and accurately localized tenderness are proofs of fracture where no crepitus, deformity or abnormal mobility can be obtained.

9. **Inguinal Hernia.**—The operation here described by O'Conor consists in first, a four-inch incision over the line of the inguinal canal, isolating and opening the sac, separating the adhesions and pushing its contents back into the abdomen. The sac is then drawn downward and, keeping the finger within the sac near the internal ring, he transfixes and ligates the sac with fine silk, then divides it about half an inch below the ligature; the stump recedes into the abdomen and the distal portion is removed. The remainder of the operation is described as follows:

The conjoined tendon and Gimbernat's ligament are next differentiated from surrounding structures, and with left index finger introduced into canal as a guide four "strong" fishing gut sutures are passed from within outwards by means of a full curved hernia needle, about one-third of an inch apart, through the projecting ledge of Gimbernat and external oblique, the ends of sutures are retained outside external oblique and the needle withdrawn.

The free ends are next threaded on a hernia needle with an opposite curve and are carried upward from within outward into substance of and through conjoined tendon. The ends of these sutures are similarly retained outside sheath of tendon and the needle withdrawn.

A straight Reverdin needle, or sinus forceps, is next entered through each suture hole in tendon, passed across just beneath aponeurosis and made to emerge at corresponding suture hole in external oblique, the end of this part of suture is caught in needle or forceps, drawn across and out through suture hole in conjoined tendon, thus both ends of each suture emerge from the same aperture in tendon, and form a most efficient submuscular stitch, excepting the fourth or lowest suture, which is only partially submuscular in that it crosses in front of external ring. These sutures are tied with sufficient force so as to approximate the tendon and Gimbernat, care being taken on adjustment of lower suture so as not to unduly compress the cord. I generally allow enough room for the insertion of my little finger.

The ends of sutures are snipped off and the knots retreat into substance of tendon and each little stitch aperture in sheath of latter is closed by fine catgut suture.

The operation which takes from ten to fifteen minutes to perform is concluded by uniting the skin wound with a continuous blanket suture.

He claims the following advantages: Simplicity, the utilization of the two strongest and most suitable structures for the barrier formation, non-interference with the position and structure of the cord, and freedom from subsequent supervention of orchitis, while there is no splitting up of structures which are never anatomically replaced. He insists on the full use of the left index finger introduced in the inguinal canal during the application of the sutures, protecting the structure of the cord, differentiating the projecting ledge of Gimbernat, and obviating the danger of injuring the external iliac vessels. In his 50 cases no accident occurred. Iodoform gauze dressing is applied, the skin suture removed on the seventh day and the patient allowed out of bed in two weeks.

10. **Facial Atrophy.**—The case reported by Burley was treated by paraffin injections to replace the lost tissue, with marked success, as appears from the illustration and the satisfaction of the patient.

13. **The Morphin Habit.**—Birge's method of treatment is the use of mandragorin, whose employment he had occasion to observe in a private institution in one of the southern states. Five drops of a specially prepared solution are given hypodermically with an eighth of a grain of pilocarpin, and this dose is repeated every two hours. If the symptoms of abstinence manifest themselves the dose may be increased until comfort ensues, even if 15 or sometimes 20 drops of the solution are taken. At the end of forty-eight hours the antidotal and eliminative effect of the remedies is usually complete. A dose of ⅛ or ¼ of a grain of morphin will then produce the same effect as it would before the morphin addiction. That no bad results have ever followed this treatment is shown by the statistics kept of over 1,000 cases in the past three years in the Homestead Sanitarium in Memphis. For heart weakness strychnia nitrate and spartein should be given hypodermically for three or four days afterward, and thorough eliminative measures should precede the dosing.

New York Medical Journal.

April 16.

14 °Ureteral Catheterism as a Routine Method of Diagnosis in Renal Disease. John Van Der Poel.
15 °Penetrating and Perforation Gunshot and Stab Wounds of the Abdomen with Report of Cases. John T. Brown.
16 °Retrouterine Hematocele. W. C. Gayler.
17 Multiple Neuritis: A Case Resulting Probably from Morphin Toxemia. Frank H. Stephenson.
18 °Guides to the Prognosis in Epilepsy, with Remarks on the Curability of the Disease, Including Reports of 34 Cases. (Concluded.) William P. Spratling.
19 °Ergot in Typhoid Fever. Alfred T. Livingston.
20 Laboratory Diagnosis. (Concluded.) M. P. Overholser.
21 °Are the Antidotal Effects of Alcohol, Glycerin, etc., on Carbolic Acid Chemical or Physical? Philip Asher.

14. **Ureteral Catheterism.**—Van Der Poel describes the

method of ureteral catheterism, which he does not consider as dangerous except in cases of bladder infection. As compared with other methods he expresses its advantages as follows:

1. The cystoscope is more easy of introduction than are the separators or segregators, is less painful during the bladder manipulations and much less so during the collection of the urines. Hence, as a rule:
2. With ureteral catheterism we can collect the urines during as long a time as may be thought necessary, the patient not requiring any supervision.
3. A cystoscopic examination of the bladder can be made at the same time, which, in some cases, is useful, in others, indispensable.
4. We are much more certain of the exact results, especially when the two urines are of a similar character, whether clear, bloody or purulent (Albarran); and
5. It is the only method by which we are fairly certain that there is no bladder contamination.

15. **Penetrating Wounds of the Abdomen.**—Brown believes in prompt operation in any wound of the abdomen that may be penetrating to its contents. He does not consider the hydrogen gas test of Senn safe. In the majority of cases he advises a median abdominal incision, above or below the umbilicus, personally preferring rather long ones so as to systematically go over the viscera, which he examines in the following manner: The stomach fore and aft, the liver and spleen. Beginning at the angle of Tritz, the small intestine is followed to ileocecal valve; the ascending, transverse and descending colon and the sigmoid flexure are then examined. A thorough examination of this sort precludes the possibility of overlooking injuries to peritoneal contents. Injuries to vessels of the mesentery and omentum can readily be controlled by ligature. Hemorrhage from the liver, pancreas and spleen are harder to manage, but a properly applied gauze tampon should be used. Brown is a great believer in the virtue of irrigation and drainage in the treatment of wounds of this character, using physiologic salt solution in large quantities. He drains with glass, the tube being placed in the pelvis through a stab wound above the pubis, and he thinks it is necessary in all cases where there has been a solution of continuity of the bowel. The patient is placed in an exaggerated Fowler's position. If a gauze tampon is used he invariably endeavors to bring the gauze through the wound of entrance so that the laparotomy wound can be completely closed. Care is insisted on in the closure of the wound. A properly applied over-and-over silkworm-gut suture meets all the indications, though if the patient's condition is good, a buried suture may be used. In resection of the bowel he uses a Murphy button, as nothing else is so quick, and the union, as he has shown, is superior to any known method of suture. A series of cases of wounds of the liver, intestine and pancreas is reported. Of the 9 intestinal wounds, 6 recovered, and of the 3 that died 1 was due to shock and 1 had a general peritonitis, but the third patient, he thinks, ought to have been saved. Of the 5 cases of liver wounds, 4 recovered and 1 died three hours after the operation from shock, the result of hemorrhage. In the pancreatic case the patient recovered. To these he adds 8 cases where laparotomy was performed and no injury to the viscera found, making a total of 23 cases, with 19 recoveries and 4 deaths.

16. **Retrouterine Hematocele.**—Gayler gives the results in Döderlein's clinic in the management of these conditions, having re-examined 36 cases. In 18 a laparotomy had been performed; 1 patient died of sepsis, 15 were absolutely well at the end of four years, and 2 still complained of pain and discomfort. The average time of recovery in the 15 was six weeks. The three who had been operated on by way of the vagina were absolutely well. Conservative treatment consisted in rest in bed, liquid diet and application of warmth to the abdomen. Only 13 of the 15 thus treated responded to the request for re-examination. Eleven were free from their complaints and showed no abnormities on internal examination. He thinks these observations teach that a patient should be given in case of hematocele three weeks of conservative treatment in an institution where surgical interference is always conveniently at hand. Of course, in interrupted extra-uterine pregnancy or violent interrupted pregnancy, operation should be performed at once.

18. **Epilepsy.**—Spratling concludes his paper beginning with a report of cases and finishing with a discussion of the same. He holds that the duration of the disease has much to do with the prognosis. Cases that have been epileptic from early life are less hopeful than those originating later. The mental state also has considerable to do with the prognosis, though in many cases it was found temporarily subverted by excessive bromid medication before admission. The length of time during which patients should be free from attacks before being pronounced cured is variously estimated; he does not see how an inflexible rule can be laid down. The peculiarities of the individual cases must be studied and the period fixed in each.

19. **Ergot in Typhoid.**—Livingston believes that the one element that is the fundamental factor of the fatal conditions is insufficient tone of some area or areas of the vital or unstriped muscular fiber of the muscular coats of the blood vessels, lymphatics and alimentary canal. The sooner this tissue is put on the highest plane of tone the better. He has demonstrated, he thinks, that ergot possesses the function of stimulating, toning and strengthening of whatever unstriped fiber is weak, relaxed, stretched or paralyzed, the blood distribution is equalized, and the overworked heart has not to pump against congested peripheral areas. He uses a dram of the solid extract of ergot dissolved in an ounce of sterile distilled (cooled) water, and after filtering the solution, adds two minims of chloroform. Absolute asepsis must be insisted on and the dose to be given hypodermically is ½ to 1 dram from two to six times a day or oftener as indicated in the individual case. He considers this the most important single medicinal agent in the treatment of the disease.

21. **Carbolic Acid Antidotes.**—Asher reports experiments made to determine whether the action of alcohol, glycerin, etc., is chemical or otherwise. He summarizes his results by saying: 1. The physical or chemical properties of the various factors used were never affected, therefore chemical change never occurred. 2. The antidotal power of alcohol and glycerin depends largely on the dilution induced. We know that a drop of sulphuric acid will produce escharotic properties at once while the same quantity in diluted state fails. In addition to that of dilution, alcohol possesses dehydrating and astringent properties, which prevent the absorption of carbolic acid by the tissues.

Medical News, New York.

April 16.

22 *Ulcer and Cancer of the Stomach from a Surgical Standpoint. William J. Mayo.
23 *Otitis Media in Croupous Pneumonia; with the Report of a Case of Acute Suppurative Otitis Media Preceding the Pneumonia. Nathan G. Ward.
24 *Hepatectomy for Tuberculoma of the Liver. Joseph Ranschoff.
25 *Relationship Existing Between Ophthalmology and Otology and Dentistry. Frank Allport.
26 *Historical Sketch of Some of the So-called Cures for Consumption; with a Few Notes on Later-day Treatment. (Continued.) J. Edward Stubbert.
27 *Hysteria and Organic Disease. William B. Noyes and Richard C. Newton.
28 *Varieties of Pulmonary Tuberculosis. Jay Perkins.
29 *Poisoning by the White of an Egg. J. R. Clemens.

22. **Gastric Ulcer and Cancer.**—Mayo's article seems to cover in substance the same ground as that reviewed in THE JOURNAL of March 12, p. 735, ¶42.

23. **Otitis Media and Pneumonia.**—The complication of otitis with pneumonia is not infrequent, occurring more often than it is recognized, according to Ward. The otitis may exist prior to the pneumonia, and the otitis as a rule is made worse, or an apparently quiescent or healed otitis may be revealed by the pneumonia attack, as the pneumococcus is far more likely to attack a previously damaged spot as the one of least resistance. There may be a simultaneous affection of both ear and lung. In a few cases the ear symptoms are manifested first, as in the one reported by the author. Otitis may be secondary to the pneumonia, and this relation of the ear affection to the systemic condition is the most frequent. The pneumococcus brought up by coughing enters the naso-pharynx, gains access to the eustachian tube, extends by contiguity of tissue to the middle ear and starts up suppuration. This usually occurs when the patient is dull or delirious and may escape the notice of the physician who attributes the symptoms of cerebral irritation and septic infection to the pneumonia. In one of Stacey Wilson's cases the otitis was revealed at the

V 42
1904

autopsy, not being previously suspected, and the pathologic changes showed suppurative processes that had evidently existed a much longer time than the pneumonia itself. In the case reported no bacteriologic examination was made, but the author considers that the clinical evidence is in favor of a pneumococcus infection.

24. **Tuberculoma of the Liver.**—Ranschoff reports a case with necropsy and discusses the technic of hepatectomy in such conditions. He thinks that the experimentally demonstrated means of arresting hemorrhage by tying the hepatic veins by transfixion sutures, together with gauze packing, seems an ideal one where applicable.

25. **The Relations Between Ophthalmology, Otology and Dentistry.**—Allport points out the relationships that may exist between oral and dental and ophthalmic and otologic conditions. He does not believe in or is skeptical of the so-called reflex ocular or aural disease of oral origin, where intense purulent or inflammatory conditions exist in the eye and ear. Such, he holds, must be produced either by the migration of infectious micro-organisms or by the extension of the inflammation by periosteal or mucous tissue. He would advise the establishment in all free dispensaries of a dental department where proper oral therapeutics might be administered, and notes with satisfaction a resolution by the National Dental Association in favor of medical colleges having lectureships on oral hygiene, prophylaxis, etc.

26. **Tuberculosis.**—Stubbert finishes his article on the treatment of tuberculosis, and summarizes that with our present knowledge and clinical experience in the treatment of the disease, diet, hygiene, fresh air, etc., are universally accepted as the foundation of all scientific methods, though these alone are insufficient and must be supplemented by symptomatic treatment in the way of antiseptics, tonics and surgical interference when necessary. He thinks that in the next three years we will see a notable advance in immunization and the stimulating effects of light. The physician in the meantime who would prescribe climate alone is as culpable as he who would ignore climate, diet and hygiene for medicinal or other treatment.

27. **Hysteria and Organic Disease.**—Noyes and Newton notice especially the subject of hysteria and the hysterogenic tendency of various disorders. Ultimately, of course, advanced cases of hysteria must develop organic disease. The first physical change may be looked for in metabolism, especially in the urinary secretion. They report cases in which there was albuminuria, granular and hyaline casts in the urine, but the supposition that a nephritis was the underlying cause of the whole train of hysterical symptoms can not be maintained. Another case is reported in which there was apparent kidney involvement, but the patient was fairly scolded out of his disorder. They say it seems reasonable enough to conclude that insignificant trouble in the kidney or anywhere else may, in a neurotic subject, by concentrating his thoughts to that region, produce puzzling hysterical-organic symptoms.

28. **Tuberculosis.**—Perkins recognizes six varieties of pulmonary tuberculosis: 1. A localized fibrous form, which is the most favorable and can stand the most vigorous treatment, with a tendency to fibrous isolation favoring recovery. 2. A fibrocaseous form, when arrest takes place after a considerable portion of lung substance has become affected. With proper care the patient may live years though with a lessened vitality. 3. A fibroid phthisis running a chronic course, found chiefly among persons exposed to the inhalation of irritating dust. 4. Phthisis florida which progresses with only temporary abatement and the patient dies of toxemia without the disease spreading to other organs. Closely connected with this is the fifth type described by Biggs as chronic parenchymatous pulmonary tuberculosis, corresponding with Powell's chronic tuberculous phthisis. They are the cases that are most frequently sent away from home to die. The onset is insidious and there may be little or no cough or expectoration, and, unless late in the disease, the physical signs are not always reliable. A prominent characteristic is the marked general symptoms as compared with the physical signs. While less rapid, it is hardly less fatal than phthisis florida. 6. The acute miliary form, overwhelming the system before the stage of dullness or mucous râles occurs.

29. **Poisoning by the White of Egg.**—Clemens reports the case of a child seized with acute urticaria, edema of the feet and collapse and symptoms of acute gastric irritation, the cause of which was at first unrecognized, but later was found to be the ingestion of food containing the white of egg, custard, ginger-bread, etc. The treatment consisted in cleaning out the gastrointestinal tract with oil, followed by full doses of calomel and later by salol and magnesium sulphate. In each case the attacks were preceded by protracted intestinal indigestion, but all the attacks were without incubation periods and must, therefore, have been intoxications. The family history is negative as regards such idiosyncrasy.

Medical Record, New York.

April 23.

30 *The Tuberculosis Hospitals of the New York State Hospitals for the Insane. Frederick Peterson and G. L. Heins.
31 *The Deficient Urea-excretion in Gout and Lithemia. Richard K. MacAlester.
32 *Operation for Congenital Saddle-nose by Introduction of a Celluloid Plate. Joseph Wiener, Jr.
33 The Bladder in Health and Disease, as Demonstrated by the Cystoscope. Henry G. Spooner.

30. **Tuberculosis Hospitals.**—Peterson and Heins describe and illustrate the hospitals that are being built for tuberculous cases at the asylums in Binghamton, Middletown and Ogdensburg, New York.

31. **Urea Deficiency in Gout and Lithemia.**—MacAlester's paper describes the findings in gout and lithemia as regards the elimination of urea and uric acid, determining the former by Doremus' instrument and the latter by Heints' method. The urinalyses of 20 cases are tabulated, showing a decided deficiency. He considers the cause of this urea deficiency as primarily due to hepatic disorders, and that it is of considerable importance from a diagnostic and prognostic standpoint. In chronic rheumatism the results of urinary analysis do not appear to deviate materially from the normal. His summary is given in the following:

1. Persistent deficient urea-excretion is always present in and characteristic of chronic gouty conditions.
2. The total urea output in gout is considerably lower than that found in chronic Bright's disease, about two-thirds of the amount in other miscellaneous chronic disorders, and only about three-fifths of the quantity excreted in health.
3. Deficient urea-excretion is an important factor in the differential diagnosis between gouty and chronic rheumatic troubles, and between lithemia and certain nervous conditions dependent on other causes.
4. It is not present in chronic rheumatic conditions.
5. It points to perverted hepatic metabolism, and lends color to the Marchiafava theory of gout, there being in the cases discussed no clinical evidence of kidney trouble in support of the renal theory.
6. A diminished uric-acid excretion is to a certain degree commensurate with that of urea.
7. Gout, gentilness and lithemia are of the same origin, and but modifications of the same disorder.
8. Chronic gouty conditions are in general more amenable to treatment, especially to balneotherapy, than chronic rheumatic affections.

32. **Saddle-Nose.**—Wiener's case was one of congenital saddle-nose in which he dissected away the skin and placed a molded celluloid plate underneath, taking care to avoid undue tension. There was a little swelling for a week or ten days, but the wound healed readily and the ultimate result was better, he says, than that shown in the illustration. He thinks the method is worthy of trial.

Cincinnati Lancet-Clinic.

April 16.

34 Nevi: A Clinical Lecture. Charles C. Miller.
35 Puerperal Septicemia. N. I. Fraid.
36 Epilepsy—Report of a Case. Earl Harlan.

St. Louis Medical Review.

April 16.

37 The History of Bacteriology. B. M. Bolton.

Northwestern Lancet, Minneapolis.

April 1.

38 Flat-foot or Splay-foot, pes Valgus. K. Hoegh.
39 Note on Tyrotoxicon Poisoning. Hubert C. Carel.
40 Ventral Hernia; Its Causes, Prevention and Cure. James E. Moore.

Journal of Nervous and Mental Disease, N. Y.

April.

41 *Report of a Case of Erythromelalgia with the Postmortem Findings. Arthur S. Hamilton.

42 *Value of Astereognosis as a Localising Symptom in Cerebral Affections. William N. Bullard.
43 Fracture of the Basis Cranii Followed by Atrophy of Both Optic Nerves and Peculiar Psychic Phenomena. O. Waterman and B. Pollack.

41. Erythromelalgia.—Hamilton reports a case in which the necropsy showed marked arterial thickening with slight diminution of the lumen, also some involvement of the nerves of the feet where the fibers failed to take the characteristic stain, and there was considerable increase of connective tissue. The muscles, cord and brain and posterior ganglia did not give any very decided pathologic findings. Granting, he says, that the arterial disease is the primary and most apparent lesion, and that the neuritis is secondary, it is still necessary to explain the arterial condition, and he thinks we will for the present have to accept the rather vague explanation of some disorder of the vasomotor system. He regards the disease as more closely related to Friedländer's obliterative arteritis than to a degeneration of the spinal cord.

42. Astereognosis.—Ballard reports a case, and in his remarks says that all evidence up to the present seems to confirm the conclusion reached by Verger and others in regard to affections of the sensibility in general, that in connection with the loss or impairment of certain other forms of sensation, the presence of astereognosis may be caused by a lesion of the cortex or portions of the thalamus and, probably, also of the internal capsule, and by destruction or injury of the projection fibers between these regions and the cortex. As a localizing symptom all that we can say is that it rather suggests subcortical affections, usually pressure. It has also been observed in lesions of the medulla, and has been reported in affections of the spinal cord and in multiple neuritis.

Maryland Medical Journal, Baltimore.
March.

44 *Pulmonary Consumption and the Possibility of Its Eradication Through the Combined Efforts of a Wise Government, Well-trained Physicians and an Intelligent People. S. A. Knopf.
45 *On Facts, Half Truths and the Truth, with Special Reference to the Subject of Tuberculosis. J. George Adami.

44. Tuberculosis.—Knopf's address refers to the dangers of tuberculosis and its spread, the possibility of predisposition, infection during childhood, etc. He protests against the popular phthisiophobia which has sprung up in regard to the disorder. He says that a clean, conscientious consumptive is as safe a companion as any that can be chosen, and that a well-equipped sanatorium for consumptives is the safest place in which not to contract the disease. He advises disinfection, dispensaries for the care of indigent consumptives, notification and supervision, and thinks that with all these measures thoroughly carried out, consumption will be practically eradicated.

45. Tuberculosis.—Adami points out some of the lacunæ in our knowledge in regard to consumption, and the widely varying ideas of some in regard to its communication and spread. He criticises both Koch's and Behring's points of view. While he admits that the transmission of bovine tuberculosis to man is demonstrated to all reasonable certainty in some of the cases, the extent and danger of bovine contagion is as yet an uncertainty. There is enough known, however, to justify reasonable restrictions and legislation as regards the disease in animals. He makes the suggestion that to test the frequency of transmission of bovine tuberculosis from animals to man, a careful bacteriologic examination be made in all cases in children to see whether the bacillus is from the beginning of bovine type.

American Journal of the Medical Sciences, Philadelphia.
April.

46 *The Influence of Complicating Diseases on Leukemia. George Dock.
47 Carcinoma of the Abdominal Cavity; Puncture of Intestine During Paracentesis Abdominis; Presence of Carcinomatous Fragments in Ascitic Exudate. Remarks on Cytodiagnosis. Norman B. Gwyn.
48 *The Clinical Behavior of the Lymph Glands in Typhoid Fever. David L. Edsall.
49 Renal Disease of Pregnancy and Retinitis Albuminurica. With Report of a Case. Leo Jacobi.
50 *Occurrence of Cystic Changes in the Malpighian Bodies Associated with Atrophy of the Glomerulus in Chronic Interstitial Nephritis. Edwin Beer.
51 *A Partial Study of Ulcerative Endocarditis. Beverley Robinson.
52 *Remarks on Gastrosuccorrhea and Tetanic Attacks Occurring with Chronic Ulcer of the Stomach. J. Kaufmann.
53 Chronic Gastritis Due to Alcohol. Nellis B. Foster.
54 A Differential Staining of the Blood with Simple Solutions. William Pepp Mariner.
55 Mechanism of the Contraction of Voluntary Muscle of the Frog. Edward B. Meigs.
56 Obstruction of the Central Retinal Artery. Report of a Case. William T. Shoemaker.
57 Empyema of Frontal Sinus, Followed by Extradural Abscess and Abscess of Frontal Lobe; Operation and Death from Hypostatic Congestion of the Lungs. Paul S. Mertins.
58 Cheiodydystrophia Fœtalis. P. W. Nathan.
59 Leucocytosis Strieta Arsenicalis Transversus; with Report of Three Cases. Charles J. Aldrich.
60 Case of Prenatal Appendicitis. W. Fred Jackson.
61 Lazatio Erecta. George T. Vaughan.

46. Leukemia.—Dock reports a case of myelogenous mixed-called leukemia with studies of the leucocytes, and discusses the literature, showing how the leucocytosis in leukemia is markedly affected by infectious diseases. It is also affected by certain drugs, such as arsenic. The explanation of the changes does not, he thinks, seem possible at present, and he shows the objections to those theories that have been offered. The process in most cases he considers is complex. Breakdown and consumption of leucocytes must occur in cases with severe cytolytic poisons, and in some must preponderate. In others, chemotactic processes will be most important, and innumerable variations in the clinical course will complete the picture partially dependent on the kind, extent and intensity of the intoxication, and partially on the histologic peculiarities of the new growths and the capacity of their cells to enter into the circulation. The therapeutic bearings are noted. The fact that the most striking feature of the leukemia, the excess of leucocytes, disappears, and sometimes the spleen and lymph glands return to their normal size, is suggestive, but that the change is not wholly favorable seems to be inferred from the fact that no case has really recovered. While some patients seem to have their lives prolonged none have lived longer than some leukemics without such complication. Dock suggests that carefully planned experiments either with bacterial products or organ extracts may show some safe and permanent result.

48. The Lymph Glands in Typhoid.—Edsall has studied the condition of the lymph glands in typhoid fever. In 60 cases examined he has obtained satisfactory notes in about 36. Of these 36 he observed in 25 the occurrence of glandular enlargement during the course of the disease. In 4 the conditions were doubtful, and in 7 there were no demonstrable changes. In several cases of relapse the changes in the gland could be followed, and were found even more prominent than in the primary attack. In most instances the enlargement appeared to develop in the latter part of the disease, and in a number of cases the first definite enlargement was noted during early convalescence. The idea was that by carefully observing the glands some diagnostic points might be learned. In cases of tropical malaria the glands of the patients observed showed no enlargement. In acute pneumonic tuberculosis there was no general enlargement. On the whole, he thinks the subject is of little consequence, for the enlargement in typhoid tends to occur late, and would be of little diagnostic value on this account. The possible value for prognosis is also suggested. The degree of glandular enlargement may be made to influence the prognosis as it occurs most markedly as convalescence is approaching, and the most marked enlargement of the gland appeared in several of the mildest cases. The chief interest, however, is in the diagnosis. Glandular enlargement, unless very marked, can not be considered a strong point against typhoid, for enlargement to the degree usually seen in syphilis is not very uncommon in typhoid fever and a somewhat milder degree is very common.

50. Cystic Changes in the Malpighian Bodies in Nephritis.—The most important facts which Beer points out, as shown by his paper, are as follows: "1. In addition to the well-known fibroid atrophy of the Malpighian body in chronic interstitial nephritis there is also a cystic atrophy. 2. Cystic atrophy is very common, and in my cases almost as frequently seen as the fibroid change."

V 42
1904

51. **Ulcerative Endocarditis.**—The causes, symptoms and therapeutics of ulcerative endocarditis are treated by Robinson, who points out the variations in the syndrome and the possibility of overlooking the condition on account of this. There may be complete absence of recognizable cardiac signs locally. Treatment seems to be largely ineffective, but Robinson sees some hopes for better results with serum treatment, though pneumococcic endocarditis seems to offer but little hope of good result. He insists on the primary importance of beginning the use of the serum at an earlier date than heretofore. The article is rather an elaborate one, and does not lend itself readily to abstracting.

52. **Gastrosuccorrhea.**—Kaufmann considers Reichmann's disease as merely a symptom of gastric ulcer, the gastrosuccorrhea being due to the increased irritation of the mucous membrane. He reports a case associated with tetanic attacks. The latter are of serious import and often lead to an early fatal issue. Since the removal of great quantities of fluid from the body is the only objective finding, he thinks that perhaps it is a most important point, and explains the changes in the system which cause the tetanic attacks. They are due to motor insufficiency, and the treatment of the disease should first be directed against this. If it can not be met by internal means it should be overcome by operation—pyloroplasty, gastroenterostomy or resection may be required. This is the rational treatment for the gastrosuccorrhea as well as for the tetany.

Illinois Medical Journal, Springfield.
April.

62 Hydrotherapy. Oscar J. Price.
63 *The Bacteriology of Milk. W. K. Jaques.
64 Report of a Case of Multiple Cystic Lymphangioma in Connection with the Peritoneum and Viscera. Svenning Dahl.
65 *Pemphigus Chronicus. E. A. Fischkin.
66 *Abdominal and Pelvic Operations During Pregnancy. J. Clarence Webster.
67 Exstrophy of Bladder. John B. Murphy.
68 How Shall We Treat Speech Disorders? James M. Brown.
69 *Etiology of Acute Bronchitis. Edson B. Fowler.

63. **Bacteriology of Milk.**—The bacteria in milk, according to Jaques, depend on many factors, one of which is the resisting power of the animal, exerted for about fourteen hours after the discharge of milk, at the end of which time a general decrease in the number of bacteria can be observed. The germicidal power of milk, however, differs with each cow. Aëration at the time of milking is of great value and may extend its sweetness for several hours. Low temperature also keeps back the chemical and bacterial activity. The number of bacteria per cubic centimeter of milk is an uncertain index of its quality; it is not their number but their disease-producing power that is of importance. The ordinary saprophytic bacteria of the cow's udder may become virulent if the cow has a fever, is improperly fed, etc. But the greatest danger of all, Jaques says, comes not from the bacteria of the country so much as from handling in the city, and infection from bottles constitutes a great danger. The cleansing is often left to the customers or to the drivers, and infection may be carried from one to another. Milk is but one factor in improving poor nourishment. A change of environment is also necessary. In considering the nutrition of a baby he suggests the following: Use less cream in hot than in cold weather. If the child is doing well on unmodified milk let it alone. Children have had their digestion ruined by predigested food. Such should be used only when indicated in an emergency and never as a steady diet. In a quart of bottled city milk there should be at least five ounces of cream. The test by observing the cream line in the bottle is sufficiently accurate for estimating the quality of the milk and testing of the cream for baby feeding. He says the energy of the milk crusade may be spent in misdirected effort. The housewife should not worry so much over the dirt at the farm, but should investigate the milkman and his wagon.

65.—This article has appeared elsewhere. See THE JOURNAL of February 27, title 31, p. 614.

66. **Operations During Pregnancy.**—Webster reviews the various conditions that may require operation during pregnancy. As regards impaction and incarceration he advises, where manipulations have failed to replace the gravid uterus, that reposition by abdominal section should be considered. In case of retroversion of the gravid uterus in which extensive, old and inflammatory adhesions and cicatrices exist, manipulation should not be carried out, but reposition by abdominal section considered as an alternative to emptying the uterus. Old chronic pelvic inflammations should call for a thorough examination with anesthesia, if necessary. With definite enlargement of the tube or ovary and tenderness on pressure, abdominal section may be advised for the purpose of removing the mass, especially if there has been trouble or abortion in previous pregnancies. When no definite swelling is found, firm adhesions may also warrant operation. A calculus should never be allowed to remain in the bladder of a pregnant woman, and it is not advisable that gestation should be allowed to continue with pyonephrosis. An intraperitoneal loss of blood causing serious symptoms indicates immediate performance of abdominal section to determine the cause and secure the vessels. In affections of the ureter and pelvis, unaccompanied with enlargement, no surgical interference is indicated. Hematoma or vulvar cyst may be treated if necessary, and a large vulvar abscess is serious as possibly leading to infection in labor. Vulvar tumors may be removed in pregnancy at the time of labor. Appendicitis is only recently noted as a complication. When an attack develops in a pregnant woman, operation is indicated as being of less risk than non-interference, and it is advisable that a non-pregnant woman who has had a definite attack should have appendectomy performed before she becomes pregnant. In rare cases the intestines may be obstructed and early operation is indicated. As regards disease of the biliary tract only urgent conditions should be operated on during pregnancy. Uterine fibroids may not interfere with the normal course, but sometimes complications are produced by impaction in the lower pelvis by cysts, prolapse and retroversion. Uterine hemorrhages may be due to submucous tumors, and the pregnancy may have a tendency to increase the growth of the tumor. The location also has much to do with the prognosis. Webster remarks that the operation of myomectomy during pregnancy must have a very limited sphere, and need be carried out only in cases of subperitoneal fibroids, which are situated low enough to be a source of danger at full time or which have specially long pedicles and are apt to fall into the pelvis. Large interstitial fibroids should not ordinarily be removed in this way unless there is risk of impaction and of obstruction in full time labor. In carcinoma of the rectum discovered in pregnancy and operable, the uterus should be emptied and the cancer removed afterwards. If inoperable, it may be advisable to allow the pregnancy to continue so that cesarean section may be performed. Ovarian tumors should be removed by abdominal section unless very small and above the pelvic brim. The mortality is very slight and frequently the pregnancy is not terminated. The care of cases where abdominal section is performed during pregnancy is much the same as in non-pregnant cases.

69. **Acute Bronchitis.**—From the study of 200 cases occurring between the ages of 15 and 60, Fowler sums up as follows:

1. Family history and nationality have little or no weight. 2. Men are more than twice as often attacked as are women. 3. Increasing age brings greatly increased susceptibility. 4. March and October, especially the former, have the greatest number of cases, and August the fewest. 5. Outside and inside occupations *per se* are of little significance. 6. Occupations which are dusty or subject one to sudden changes of temperature, either natural or artificial, render one especially liable to the disease. 7. Women in the period from 30 to 45 with onerous family and home duties are prone to bronchitis. 8. Previous attacks or various organic diseases lower the natural immunity. 9. Irregular habits or excesses of any kind especially predispose to the disease. 10. Bacteria unaided are probably powerless.

Colorado Medical Journal, Denver.
February.

70 *Formation and Resolution of Peritoneal Adhesions and Exudates. Horace G. Wetherill.
71 *Formaldehyd as a Preservative in Urine. Frank W. Kenney.
72 *Divulsion of the External Sphincter Muscle as a Factor in the Treatment of Constipation, with the Report of a Case. Fred P. Taxbury.

70. **Peritoneal Adhesions.**—The argument of Wetherill's paper is that peritoneal adhesions and exudates are generally conservative in their purpose and effect, and that when the

source of irritation that has produced them is removed they more or less completely disappear. Tympanites, through increasing intra-abdominal pressure without peristalsis, and even so-called intestinal paralysis are also means to the same conservative end. We should, therefore, be careful about antagonizing these conservative agencies during an acute stage by untimely operation or the giving of food or cathartics. Ordinarily, an interval operation will be needed for the removal of the source of infection and such are almost uniformly successful, attended with a very low mortality. This, of course, does not apply to first-day operations in acute peritoneal infections, the necessity of which is unquestioned.

71. **Formaldehyd in the Urine.**—Kenney reaches the following conclusions from his investigation: Formaldehyd as an artificial ingredient to the urine will lead to deceptive urinalysis, making the urine appear albuminous when it is not, and preventing the typical reaction when albumin is present. Introna's test, namely, the use of formaldehyd in albuminous urine as a reagent, is questioned since the effect of formaldehyd on negative urine is the same, though to a more marked degree than that on albumin in solution, the difference in the color and density of the precipitate being immaterial in Kenney's opinion. The therapeutic use of urotropin is a matter worthy of study from the point of view of possible production of pseudo-albuminuria.

72. **Divulsion of the Sphincter for Constipation.**—Tuxbury holds that in certain cases of constipation the constant irritation of the retained feces causes a hyperintensified action of the external sphincter which is beyond the power of the will to control. In such cases gradual divulsion of the sphincter is advisable, and he reports a case to demonstrate its efficacy.

Archives of Otology, New York.

February.

73 *Osteomyelitis of the Temporal and Adjacent Bodies of the Skull as a Sequel of Otitis Media Suppurativa. Charles W. Richardson.
74 *Tubercle like Bacilli in the Discharge of Chronic Purulent Otitis. A. De Simoni.
75 Contribution on Otogenous Diseases of the Brain, Meninges and Venous Sinuses. Dr. Suckstorff and Dr. Henrici.
76 Primary Epithelioma of the Temporal Bone. Dr. Sturm.
77 Tuberculosis of the Ear Ending in Recovery. I. Hegetschweiler.
78 Pathology of Deaf-mutism. Report of a Case of Acquired Deaf-mutism with Obliteration of Tympanum, Aditus and Antrum. Herman Hölsel.

73. **Osteomyelitis of the Skull After Otitis.**—Richardson reports and discusses a case in which there was an osteomyelitic condition involving the temporal bone. It was treated by exposure and curetting with success. He holds that this disorder is probably more common than has been reported to date, the operator not appreciating the character of the invasion, and that cases have been lost because they were considered only a severe type of mastoiditis running an atypical course. In his case he anticipates the objection to the term osteomyelitis by saying that there was no question but what it was clinically and anatomically different from typical mastoiditis, extending far beyond the confines of the mastoid and attended with profound general sepsis from the onset. As it extended rapidly and was not limited by sutural borders, and corresponded to all the symptoms of acute primary osteomyelitis, no other name would be correct.

74. **The Acid-fast Bacilli in Otitis.**—De Simoni reports a case where a bacillus morphologically resembling to some extent the tubercle bacillus, was found abundantly in a case of otitis. It was straight or only slightly curved; the bacillus looked longer and more slender than the common tubercle bacillus, particularly in liquid media and recent cultures. It stained with the ordinary aniline dyes quite like tubercle bacilli, and was not decolorized by Gram. It was non-pathogenic to guinea-pigs and rabbits.

Canada Lancet, Toronto.

April.

79 *Experimental Production of Antitoxic Sera and Their Value in the Treatment of Tuberculosis. Albert G. Nicholls.
80 Etiology, Diagnosis and Medical Treatment of Gallstones. W. P. Caven.
81 *Relative Prevalence of Contagious Diseases in Children of School Age. P. H. Bryce.
82 *Study of Immunity in Variola and Vaccinia. C. A. Hodgetts.

79. **Antitoxic Sera in Tuberculosis.**—An experimental study of antitoxic sera in tuberculosis is reported by Nicholls. He used goats for producing his serum, experimenting on rabbits and guinea-pigs. From the autopsy findings in at least one of his experiments and in the effect on rabbits it would seem that the treatment had some restraining influence on tuberculous processes, not powerful enough, however, to overcome it. He thinks that in view of all the facts known, it must be admitted that it is possible to prepare a serum that is to a certain extent antitoxic toward tuberculosis, but the evidence that the serum so far prepared is curative is very unconvincing to him. Serum may be antitoxic only or it may be germicidal, and in tuberculosis we need both qualities. Short of killing the germs *in situ* he does not think we will achieve success.

81. **Diseases of School Children.**—Bryce discusses the incidence of disease in school children, especially scarlet fever and diphtheria. He says the more effective methods adopted in Ottawa in 1903 have caused a reduction of 50 per cent. in the cases of scarlatina and of 85 per cent. of deaths; 41 per cent. in diphtheria with 54 per cent. of deaths. He thinks there should be a general conviction that disease is liable to be disseminated among school children and that an enormous saving of sickness and mortality is possible if the public is properly educated to action in the matter.

82. **Smallpox.**—Hodgetts holds that the immunity to smallpox after vaccination and more especially after mild attacks of variola is only relative and that there is a danger of serious consequences if those who have suffered from a mild epidemic, such as lately existed, should be left without further protection. We calculate the immunity ordinarily from some former experience when the disease may have been of a much severer type.

Medical Review of Reviews, New York.

March 25.

83 *The Necessity of a Knowledge Among General Practitioners of the Diagnosis and Treatment of Glaucoma. D. B. St. John Roosa.
84 Complications of Chronic Suppuration of the Middle Ear—Etiology and Diagnosis. T. Passmore Berens.

83. **Glaucoma.**—Roosa points out the advantages of an acquaintance with this condition on the part of the general practitioner, especially in treating eye diseases, to avoid mistakes. An error in diagnosis may lead to a complete loss of sight and a remaining eyeball which is a constant source of discomfort and pain, and sooner or later both eyeballs may be affected. The practitioner should learn to recognize intense, neuralgic pain, circumcorneal redness, anesthesia of the cornea, great failure in vision, general turbid look of the front of the eye, and, above all, the hardness of the eyeball as compared with the normal eyeball. In some cases the diagnosis must be reversed on account of the possibility of intraocular tumor, but aside from the increased tension the pupil will show a reflex or there will be a lateral enlargement of the globe. He prefers eserin as the treatment for these cases, using castor oil as a vehicle. If afterward fomentations are used for not less than twenty minutes, the pain is much relieved. The strength of the eserin may be up to 2 grains to the ounce, or even more. Illustrative cases are reported.

Archives of Pediatrics, New York.

April.

85 Chronic Diffuse Nephritis in a Four-year-old Boy with a Rudimentary Kidney. A. C. Cotton.
86 *Etiology of Rachitis. Rowland G. Freeman.
87 *Value of the Incubation Period in the Diagnosis of the Acute Exanthemata of Childhood. Alfred Hand, Jr.
88 *Necessity for Supplementary Measures After the Removal of Adenoids. Percy Fridenberg.

86. **Rachitis.**—Freeman, from his study of the subject and the literature, concludes that from animal experiments it would seem to be indicated that unsuitable food can produce rachitis, and that possibly certain bacteria or intestinal toxins may have the same result. The clinical observations are too elaborate for possible deduction, but are interesting inasmuch as they show less rachitis in tenement than in institution children fed on modified milk, and the greatest amount of rachitis in institution babies fed on breast milk with auxiliary feedings of condensed milk.

V 42
1904

87. **Incubation Period of Acute Exanthemata.**—The incubation period of scarlatina, measles and rötheln are discussed by Hand, who finds a wide difference of opinion in all cases excepting in measles. He reports the history of a family epidemic in which the incubation period of scarlet fever must have been thirteen to seventeen days, or much longer than is usually credited. He thinks much harm might have been done if the disease had not been sufficiently severe to have been positively recognized and had been called rötheln. In regard to measles, the incubation period may often be of value in small family epidemics, helping to tell when other members will develop the disease. Beyond this it has little value.

88. **Adenoids.**—One aspect of the study of adenoids has, Fridenberg says, received too little attention from the profession, namely, the after-treatment and the need of supplementary measures for assuring the operative results, producing the habit of nasal respiration and correcting structural deformities due to abnormal functioning. The removal of adenoids does away with the obstruction, but does not insure nasal respiration, and training of the child is required. After the nasal respiration during waking hours has been established there will be no mouth breathing during sleep, and he suggests indulgence in the habit of chewing gum for a period to assist in the reflex mechanism of keeping the mouth shut. It is not difficult to break the habit after its utility is past. He mentions a mechanical splint for keeping the mouth shut during sleep, thus aiding the treatment. The second detail to which the after-treatment should be directed is the faulty arrangement and crowding of the teeth, the malformation of the alveolar arch and the underdevelopment of the jaw and chin. Removal of adenoids in itself will not cure this, and he believes in the intelligent dental surgeon's intervention in such cases.

Journal of the Michigan State Medical Society, Detroit.

April.

89 The Newer Methods of Detecting Renal Insufficiency—Cryoscopy and the Phloridzin Test. Benjamin R. Schenck.
90 Eclampsia. Charles L. Bonifield.
91 Some Interesting Developments in Ophthalmology During the Past Year. Walter R. Parker.
92 Medical Reorganization. Edward J. Witt.
93 *What Is to Become of the Medical Graduate? John L. Irwin.
94 *The Use of Large Probes in the Treatment of Stricture of the Nasal Duct. E. W. Gillman.

93. **What Is to Become of the Medical Graduate?**—Irwin uses the state board of health figures to show the decrease in the prevalence of disease and of general morbidity and mortality. He figures a total falling off in sickness of 19 per cent., and from this deduces that the income of doctors is necessarily decreasing. Moreover, certain diseases, such as smallpox and scarlet fever, are cared for in most communities by public appropriation. The other disorders on which the general practitioner depends for the bulk of his practice have fallen during the past two years 47 per cent. below the average of the preceding ten years. The number of Michigan physicians is put down as 4,400, and there is an annual increase from the output of graduates from six medical colleges in the state and from incomers from outside the state. He says: "Bearing in mind the altruistic effect of the sanitarian who reduces the percentage of disease, and the egotistic affort of the medical college professor who lures the unsuspecting freshman to swell the ranks of the noble profession of medicine, and the confiding optimism of the said freshman who, after graduation, sits back and waits for the problematic increase in a sick rate which the sanitarian is paid to reduce, and from which his former professor expects to derive sole benefit, the question is: 'What is to become of the medical graduate?'"

94. **Stricture of the Nasal Duct.**—Gillman recommends the use of large probes after slitting the upper or lower canaliculus. He then uses a No. 5 probe and rarely fails to make the passage direct. At the second séance a No. 7 or even a No. 8 probe may usually be readily passed, gradually increasing until a No. 14 or 16 is reached, when the interval of time between the probings is gradually increased to three or four days, a week or two weeks, a month and even longer periods. The probes are allowed to remain *in situ* from ten minutes to half an hour at each sitting. Since adopting the larger probes he has discarded the routine syringing of the sac in cases of dacryocystitis, but orders a collyrium composed of boric acid and zinc sulphate dropped into the affected eye twice daily. Any internal disease of the nose must, of course, be treated. He thinks if this course were followed many operations such as extirpation of the lachrymal sac or gland would be avoided.

New Orleans Medical and Surgical Journal.

April.

95 *Notes and Observations on Uncinariasis in Porto Rico. (Concluded.) Bailey K. Ashford and W. W. King.
96 The Value of the Leucocyte Count as an Aid to Diagnosis and Prognosis in Appendicitis. J. R. Guthrie.
97 A Suggestion in Operations for Hypospadias and a Method to Prevent the Closure of the Nares in Rhinoplasty. E. Dunegre Martin.

95. **Uncinariasis in Porto Rico.**—Ashford and King's article gives a very full account of the conditions in Porto Rico and the methods of treatment which were adopted there. The practice advised is the giving of a full dose of Epsom salts, following it with 4 grams of thymol, avoiding any solvent of this drug. The bowels having moved well, he keeps the patient in bed, and at 7 a. m., withholding breakfast, administers 2 grams of thymol powder, in 6 cachets. He repeats the dose at 8 a. m., and at 11 or 12 gives another dose of Epsom salts, which is a physiologic antidote and effectually stops absorption. The thymol benumbs or kills the parasites and the Epsom salts carry them off. He finds for the after-treatment that Bland's pills are as good as any preparation. The complications are treated as they arise. The prophylaxis of the condition is dependent on the sanitary arrangement. The use of latrines would be a great help, and he thinks plowing the ground at fortnightly intervals would kill off a great many of the parasites. Cutting down the underbrush and firing the grass would be a good thing. The treatment of as many cases as possible will reduce the danger.

Medical Fortnightly, St. Louis.

March 26.

98 The Diagnosis of Abdominal Cancer Before Tumor Is Apparent. Frank G. Nifong.
99 Clinical Report of a Case of Rabies. A. W. Schreiber.
100 Case of Rabies. Fred C. Cave.
101 Pathological Findings in Two Fatal Cases of Rabies. R. B. H. Gradwohl.
102 Rabies. Carl Fisch.

April 11.

103 *The Value of a Fecal Fistula in the Treatment of Typhoid Perforation. Willard Bartlett.
104 Forensic Medicine, or, Where Professions Unite in the Cause of Truth and Justice. Owen P. Thompson.
105 Vaccination, Its Application, Benefits and Disadvantages. Wm. P. Barclay.

103. **Typhoid Perforation.**—Escher's method of making a temporary fecal fistula in these cases is strongly advocated by Bartlett, who reports a case in which the method was employed with success. Of course, hernia is likely to ensue, but that is insignificant as compared with other possible consequences.

American Practitioner and News, Louisville, Ky.

March 26.

106 Pneumonia and Its Treatment. S. P. Oldham.
107 Ludwig's Angina. W. O. Humphrey.

Pennsylvania Medical Journal, Pittsburg.

March.

108 Practical Treatment of Pulmonary Tuberculosis. Henry Marion Neale.
109 Some of the More Infrequent Causes of Obstruction of the Common Bile Duct. Levi Jay Hammond.

American Medical Compend, Toledo, Ohio.

April.

110 Stricture of the Esophagus, with Reports of Cases. Operation Through Stomach (Dr. Abbe's Method). Wm. J. Gillette.
111 Typhoid Fever. Wm. A. Dickey.
112 Surgical Clinic at Metropolitan Hospital, New York. Thomas H. Manley.
113 Treatment of Sciatica with Nuclein. J. C. Tritch.
114 Chronic Nasal Catarrh; a Simple and Effective Treatment. G. A. Gilbert.
115 The Mesogastrium. (Continued.) *Byron Robinson.

Canadian Practitioner and Review, Toronto.

April.

116 Treatment of Epithelioma with X-ray. Douglass W. Montgomery.
117 Gastroenterostomy, with Report of Cases. Ingersoll Olmsted.
118 Report of Case of Cesarean Section. Fred C. Stevenson.
119 Serum and Septicemia. F. Arnold Clarkson.

Vermont Medical Monthly, Burlington.

February 15.

120 Etiology and Pathology of Pneumonia. Frank C. Phelps.
121 Clinical History and Diagnosis of Pneumonia. O. C. Baker.
122 Treatment of Pneumonia. A. E. Bailey.

Medical Times, New York.

April.

123 Immoderate Physical Exertion a Factor in Etiology. Theo. J. Jacquemin.
124 Remarks on the Pancreatic Duct from Corrosion and X-ray Anatomy. Byron Robinson.
125 Corroborative Method of Urinary Analysis. A. L. Benedict.
126 Spring, Autumnal Catarrh and Asthma. G. R. Johnson.
127 Some Remarks on Pneumonia, with Consideration of a Case of the Acute Tubercular Form. Louis Faugeres Bishop.
128 Maternal Impressions. J. W. Coolidge.
129 Famous Operations in Surgery as Described by Their Originators. Wm. Wormley.

Journal of Advanced Therapeutics, New York.

April.

130 Currents of High Frequency: Apparatus and Therapeutic Uses. F. Goodwin Du Bois.
131 *Plea for Electro-therapeutics Proper. (Continued.) W. J. Herdman.
132 New System of High Frequency Therapeutics. (Continued.) Frederic P. Strong.
133 Methods Used in Radiography. Russell H. Boggs.
134 Radiant Frequency Transformation or Fluorescence. Margaret A. Cleaves.
135 Physio-pathologic Action of High-frequency and High-tension Currents on the Normal Skin. Histologic Researches. (Continued.) G. Arsonso and S. Fubrozzi.

131. See abstract in THE JOURNAL, xli, p. 978.

Kansas City Medical Index-Lancet.

April.

136 Medical Organization. A. R. Snyder.
137 Placenta Previa. David Gardner.
138 Mind and Its Dissolution. T. P. Lockwood.
139 Gastroenteritis in Children. J. Henry Barnes.

Louisville Monthly Journal of Medicine and Surgery.

April.

140 The Perineum. C. Steiner.
141 Tetanus. W. O. Roberts.
142 Surgery of the Pancreas. John R. Wathen.
143 Congenital Dislocation of the Hip. James B. Bullitt.

Journal of the Kansas Medical Society, Topeka.

April.

144 Loco Once More. L. B. Sayre.
145 Education of the Public in Medicine. George Howard Hoxie.
146 The Degeneracy of Therapeutics. J. P. Stewart.
147 McReynolds' Operation for Pterygium. George A. Hamman.
148 Conventional Quarantine of Scarlatina. H. L. Chambers.
149 Case of Acute Bilateral Facial Palsy with Complications. (Continued.) S. Grover Burnett.

Carolina Medical Journal.

March.

150 Painless Circumcision. W. Hosea Moss.
151 The High Operation for Varicocele. H. A. Royster.
152 Foreign Bodies Under the Eyelids. Foreign Bodies in the Cornea. W. H. Wakefield.

International Journal of Surgery, New York.

April.

153 *The Value of Fecal Fistula in the Treatment of Typhoid Perforation. Willard Bartlett.
154 *Significancy and Management of Paralysis of the Bowel. George E. Brewer.
155 New Method of Operation in Cases of Spina Bifida. Eugene Wasson.
156 The Surgical Assistant. Operations In and About the Vagina. (Continued.) Walter M. Brickner.

153. See also ¶103 above.

154. See abstract in THE JOURNAL of January 16, p. 190.

Atlanta Journal-Record of Medicine.

April.

157 The Imperfect Development of the Uterus. R. R. Kime.
158 Toxic Dermatoses. Bernard Wolf.
159 Cases Illustrating Plastic Surgery of the Face. M. B. Hutchins.

Post-Graduate, New York.

April.

160 Malingering, with Report of a Case. J. Seymour Emans.
161 Peritonitis. Its Importance to the General Practitioner and to the Surgeon. Forbes Hawkes.
162 Mieskainismus, the Deeply Rooted Inclination of Mankind to Combat New Ideas. A. Rose.

Southern Practitioner, Nashville, Tenn.

April.

163 Cancer of the Uterus and the Physician's Duty. M. C. McCanne.
164 Should Embryotomy Be Done on the Living Fetus? Geo. C. Trawick.
165 Stammering and Stuttering. James M. Brown.

[Anopheles Punctipennis, Not Maculipennis.—In abstracting Hirshberg's paper from the *Bulletin of Johns Hopkins Hospital* last week we inadvertently said *maculipennis* for *punctipennis*, which reverses the author's meaning.]

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London.

April 9.

1 Some Experiments on Enterica, Scarlet Fever and Measles in the Chimpanzee. Albert E. Grunbaum.
2 *Experimental Nephritis Followed by Decapsulation of the Kidney. I. Walker Hall and G. Herxheimer.
3 Some Further Observations on the Life History of Filaria Immitis, Leidy. Thomas L. Bancroft.
4 *Digestion and Absorption of Hemoglobin. W. D. Halliburton.
5 *Notes on Recent Cancer Mortality in the Thames Valley. Alexander Urquhart.
6 *Action of the Blood Serum from Cases of Acute Mental Disorder on B. Coli Communis. Alice V. Johnson and Edwin Goodall.
7 Cases of Lateral Sinus Pyemia. William Sheen.
8 Physical Development of the London Schoolboy; 1,800 Examinations. Leslie Thorne Thorne.
9 Epidemic Sore Throat from Suppurative Mammitis in Cows. Robert French.
10 Papilliferous Cyst from an Axillary Sudoriparous Gland. H. Betham Robinson.
11 Traumatic Rupture of the Small Intestine. R. Lawford Knaggs.
12 Note on Perineal Litholapaxy (Keith's Modification). A. Heaton.

2. Decapsulation of the Kidney.—Hall and Herxheimer's experiments were performed on rabbits and dogs. Experiments on healthy dogs were also communicated to them by Harold Johnson. They describe the methods and remark that while they can not produce an interstitial nephritis and reproduce the actual condition observed in the human subject, there is no good anatomic basis for the operation in degenerative nephritis. If the changes are at all analogous in the human subject, they should imagine that the laceration, hemorrhage and the new formation of the capsule would rather tend to accelerate the interstitial inflammation; while in the event even of any concomitant arteriosclerosis there would be no possibility of much vascular anastomosis of replacement of the channels ruptured. But if there is no anatomic basis for the operation there may be another explanation of the rapid flow of urine—the increased excretion of urea and the disappearance of albumin in cases which have been observed to follow decapsulation. By some, the effects are attributed to relief of the congestion, but in their experiments intense hyperæmia persisted after the capsule had re-formed. The explanation suggested by Pel, Jaboulay and others that the improvement is due to the action of the sympathetic ganglion raises the question as to the necessity for the entire denudation of the renal capsule. The authors ask if renal puncture or one longitudinal and several transverse incisions would not be a better method. They can not give any experimental evidence on this point, and refer to favorable statistics of Guiteras, Suker and others, but say that they are minimized by several considerations: 1, the limitation of the operation to the later stages of the disease; 2, the exact stages and extent of chronic nephritis do not permit of accurate diagnosis; 3, chronic nephritis is characterized by acute exacerbations and frequent remissions, though its anatomic course is generally progressive. Their general opinion as reflected in their comments is not exactly favorable to the operation. They call attention to the fact that such operators as Israel, Nicolayson and others have abandoned the method. It is, of course, a matter of common knowledge that the simpler renal puncture relieves tension and promotes renal function, so perhaps the description of the changes observed after decapsulation may emphasize the probability of rapid local reparation when temporary obstruction is removed, and this suggests earlier surgical treatment of post-febrile and acute renal manifestations which, when unrelieved, are often fatal.

4. Digestion and Absorption of Hemoglobin.—The conclusions reached by Halliburton as to the absorption of hemoglobin are in substance as follows: 1. The administration of iron in the form of powdered hemoglobin to rats causes an increase in the number of their red blood corpuscles and the amount of hemoglobin in the blood. 2. There is every reason to believe that hemoglobin is actually absorbed. The intensity of the ammonium sulphid reaction is much greater than in animals kept on an iron poor diet. The main situation for absorption, as judged by this reaction, is the extreme pylorie end of the

V 42
1904

stomach and the first few inches of the duodenum. The spleen appears to be the principal organ for storage. 3. Hemoglobin in the stomach is converted into acid hematin. This constitutes the "coffee grounds" in the vomit of hematemesis. Acid hematin after it is formed, is slowly precipitated, and is indiffusible through parchment paper. This will account for the absorption in the first part of the duodenum. Lower down where the reaction is again acid, the absorption ceases. In many animals, however, the reaction of the intestinal contents becomes alkaline owing to the ammonia formation in the large bowel, but in the rat he found that the contents of the cecum and of the first part of the colon were still acid. Alkalinity does not occur until the lower portion of the colon is reached.

5. **Cancer Mortality in the Thames Valley.**—The statistics of all the counties showed a cancer death rate higher than that of England as a whole. There is an increase in the later decennia over the former of between 1 and 2 per cent., and, as a rule, a larger increase in the riparial districts than in the non-riparial. The figures are compared with the total number of deaths from all causes by a method which can give only approximately accurate results. The conditions in regard to age and sex distribution in the main districts vary but slowly, and there is little liability to error in comparing the cancer death rates of the same district or town at the different periods. The statistics seem to justify the conclusion that the Thames Valley has a relatively high mortality from cancer and the uniformly high rate on both of the banks suggests that there may be a connection between the river floods and the extent of the disease, but it is not explained. If we presume a parasitic origin of the disease, the drying vegetation on the river banks may be a favorable nidus for the growth of the parasite. The facts seem rather to support this view, but it does not explain the cause of the increase of cancer which is everywhere apparent. Given, however, other unknown predisposing factors, lowered vitality and impaired resistance, we may have along the banks of the river a more or less constant manufactory of the materies morbi.

6. **The Action of the Blood Serum of Acute Insanity on Bacillus Coli.**—Johnson and Goodall publish a table showing the agglutinative power of the serum of 100 cases of acute insanity on mixed and single strains of the colon bacillus, also the results in 29 cases of acute melancholia and 53 cases of acute mania. From these tables the following conclusions are drawn:

1. In 50 per cent. of the total cases of acute insanity there was agglutination, whereas this was present in only 15.5 per cent. of the controls. 2. The agglutination was partial in the great majority of the cases (39 per cent.). 3. In those forms of the disease in which the cases were sufficiently numerous to permit of percentages being taken (mania and melancholia) the preponderance of partial over good agglutination was also obvious. 4. The percentage of agglutination (good and partial) was greater (58.5) in the cases of melancholia than in those of mania (45.2). 5. The percentage of good agglutination was greater in melancholia than in mania. 6. Even when the disease is quite recent in duration there is as often as not a failure to agglutinate.

The Lancet, London.

April 9.

13 *Fractures of the Skull. Louis Bathe Rawling.
14 *Use of Dr. Marmorek's Antituberculous Serum. Arthur Latham.
15 *Mental Condition in Epilepsy in Relation to Prognosis. William Aldren Turner.
16 *Cardiac Dullness in Cases of Cancer. W. Gordon.
17 Case of Removal of a Polypoid Growth from the Base of the Skull After a Preliminary Excision of the Upper Jaw. F. A. Southam.
18 Case of Carcinoma Probably Originating in Retained Testis. W. Sydney Darby.
19 *Dilatation of the Heart. E. H. Colbeck.
20 Intralaryngeal Growths Treated by Means of the Galvano-cautery. J. Dundas Grant.
21 A Non-toxic Preparation of Iodin. V. H. Wyatt Wingrave.

13. **Skull Fractures.**—Rawling's elaborate lecture discusses the mechanism of skull fractures, especially of the base, showing the greater resistance of the vault and the theories on which the basal portions are likely to participate in the lesion. He thinks that the bursting and compression and "contrecoup" theories of basal fractures are both untenable and that Aran's irradiation theory with certain modifications accounts satisfactorily for those basal fractures that follow blows on the vertex. Most basic fractures, he thinks, result from force applied directly around the basic level, and are the result of a splitting force, the line of fracture tending to travel across the base, parallel to the original direction, though not necessarily in the same straight line. The influences of sutures, of the basic foramina, of air sinuses and of the arrangement in the auditory region are also discussed. Fractures of the vault may be limited or may coexist with basic fracture and the greater the force the greater the tendency to limitation, while force applied obliquely downward usually results in extension toward the basic area. The possibility of fracture of the external table without injury to the internal table was until recently disputed, but the late war in South Africa has demonstrated the existence of such a fracture. Fractures of the internal table are most common where the diploic tissue is most abundant, and that is the mid-parietal and anterior frontal regions, where they may occur without any apparent injury whatever to the external table, but where the external table is fractured there is very probably also a fracture of the internal one, producing many complications. The prognosis in fractures of the anterior fossa are most favorable. Fractures of the middle fossa are most dangerous from local complications, infection from the nasopharynx, ear and injury to the arteries, but the mortality is probably progressive from before backward in these fractures and the proximity of the vital centers in the fourth ventricle renders posterior fossa fracture especially dangerous. The general mortality of all fractures with or without depression is from 20 to 25 per cent.; least in children, highest in old age. The possibility of recovery in posterior fossal fracture is admitted by most, though some deny it. He closes with some remarks on the medicolegal aspect of skull fractures.

14. **Marmorek's Antituberculous Serum.**—Latham has employed Marmorek's serum obtained from Marmorek himself, and thinks that when given in carefully graduated doses with proper precautions and in suitable cases it does no harm. Moreover, his experience tends to show that it does produce a specific antitoxic effect. An extended trial, he thinks, should be made, but it must not be forgotten that great care must be exercised in the administration, and it should be continued for a considerable period before definite results can be expected. He at first injected it under the skin in doses of 10 c.c. every day for a number of days, following this by an intermission and giving it again in reduced dose. Now he uses a dose of 5 c.c. for four consecutive days followed by three days of rest, having two or three repetitions of this, but after the third series giving at least two weeks' intermission. He thinks he has seen patients improve during periods of intermission.

15. **Epilepsy.**—The summary of Turner's article is given as follows:

1. A total of 161 cases, which have been under my observation at the Colony for Epileptics, Chalfont St. Peter, has been used for the investigation. 2. The mental features of the interparoxysmal state have been divided for descriptive purposes into four classes, the first containing those epileptics without any obvious mental impairment and the fourth those with the highest grade of dementia. 3. The interparoxysmal mental condition is discussed in its several varieties and degrees with special reference to the influence of sex, hereditary disposition, age at onset and character, duration and frequency of fits. 4. Sex has little influence on the mental condition, but it may be stated in general terms that males are numerically more afflicted than females (61 per cent. of the former to 78 per cent. of the latter), but that the highest degree of dementia is somewhat more common in women than in men. 5. A family predisposition to epilepsy and insanity, although not necessarily militating against the retention of normal mental faculties, favors the supervention of some degree of mental impairment. A higher percentage with a hereditary history is found among those epileptics who show the profounder degrees of dementia, than among those who show merely impairment of memory, or a normal mental condition. 6. The duration of the disease influences to some extent the mental condition. Mental impairment is less frequent when the fits have lasted for under five years, just as mental integrity is less commonly seen when attacks have persisted for ten or more years. But mental health and mental deficiency are observed in cases in which the disease has lasted respectively for over twenty years and for less than five years. 7. The age at the onset of the convulsion influences to some extent the subsequent mental condition, for the earlier the onset, especially during infancy and childhood, the less the probability of an unimpaired mental state. 8. The character and combination of the fits have an important relation to the mental condition, the profoundest degrees of dementia being most commonly seen when the major and minor attacks coexist. The petit mal seizures occurring alone are found with the lower grades of mental impairment. When the grand mal occurs alone mental health is as common as mental deficiency. 9. There is a direct association between the frequency

of the fits and the mental state—the more frequent the seizures the greater the degree of mental impairment, and vice versa. Fits recurring in series are accompanied by a high grade of dementia. 10. The term "facies epileptica" is applied to the physiognomy characteristic of the disease in many epileptics. It is found more commonly with the higher grades of dementia, but its existence is not limited to such cases, for it is observed in those with only impairment of memory as well as without any mental failure. 11. The view is upheld that the interparoxysmal mental condition seen in most cases of epilepsy is one expression of the neurosis of which the fits constitute another; that the former is therefore not directly dependent on the seizures, and that the frequency and character-combination of the paroxysms in association with the degree of mental failure indicate the severity and intensity of the disease. 12. The following figures show the percentage frequency of the four classes of mental deficiency among the 161 cases used for the purposes of this paper: Class A, intellectually normal, 13.6 per cent.; Class B, with impaired memory, 31.6 per cent.; Class C, feeble minded, 23.4 per cent.. and Class D, demented, 29.1 per cent.

His paper is an elaborate statistical study covering all the points mentioned above.

16. Cardiac Dullness in Cancer.—Gordon observed in the routine examination of several patients with gastric cancer that though no evidence of ordinary emphysema existed, the area of cardiac dullness was very much reduced, if not actually obliterated. The reduction or obliteration of cardiac dullness was sometimes associated with a rather surprisingly small and soft pulse. He has become so sure that this suggests cancer that he has risked a diagnosis on it, and in five consecutive cases the diagnosis proved correct. Putting aside cases where special causes exist, either for the obliteration of the heart dullness or for the prevention of such obliteration, the following, he says, seems to be true:

1. Great reduction or obliteration of the normal cardiac dullness is common in cases of cancer, particularly in cancers of the alimentary canal and in their late stages. 2. This loss of cardiac dullness does not seem to be found in the earliest stages of a cancerous case, but may precede cachexia, marked wasting and loss of skin elasticity. 3. It is rarely observed in non-cancerous cases. 4. It is rarely absent in the later stages of cases of cancer of the alimentary canal. 5. It does not seem to occur in cases of sarcoma. 6. In doubtful cases its presence is highly suggestive of cancer; its absence is slightly suggestive of the absence of cancer, if the symptoms under consideration have lasted for several months.

A number of cases are reported.

19. Dilatation of the Heart.—The theory of development of heart dilatation held by Colbeck is that of impairment of its muscle power. He thinks the same theory might explain the mode of production of dilatation of other hollow muscular viscera, stomach, intestines, etc.

The Practitioner, London.

April.

22 Two Clinical Lectures on Progressive Muscular Atrophy. F. W. Mott.
23 Typhus in Egypt. F. M. Sandwith.
24 Some Observations on Carcinoma of the Colon. H. S. Clogg.
25 Plea for Aseptic Midwifery in General Practice. P. R. Cooper.
26 Hygienic Surgery. Fred K. Eltinger.
27 Cerebral and Mental Diseases in Relation to General Medicine. H. Campbell Thomson.
28 Some Recent Work on Diseases of the Pancreas. R. Salisbury Trevor.
29 Provision of Sanatoria for London Consumptives by the Metropolitan Asylums Board. Louis Parkes.

Annales de Dermatologie et de Syphiligraphie, Paris.

Last indexed XLI, page 1176.

30 (IV, No. 10.) Contribution à l'étude des tuberculides. Nicolau (Bukharest).
31 *Sur l'installation de la syphilide pigmentaire du cou (of the neck). Hallopeau.
32 (No. 11.) *L'acne hypertrophique du nez et son traitement chirurgical (acne of nose). W. Dubreuilh (Bordeaux).
33 *Quelques reflexions sur certains traitements actuellement mités dans la lèpre. J. Brault (Alger).
34 (No. 12.) De la dermatite polymorphe douloureuse (dermatite herpetiforme de Dühring-Brocq) chez l'enfant (in children). P. Meynet and M. Pêhu.
35 *Dermatites pyémiques. A. Lebet (Berne).
36 (V, No. 1.) Des erythémato-sclèroses et, particulièrement, de l'erythémato-sclèrose pemphigoïde. C. Audry (Toulouse).
37 Etude du pemphigus végétant de Neumann. R. Stanziale (Napies).
38 Cas de lichen verruqueux du cuir chevelu (of scalp). Emery and Umbert.
39 (No. 2.) Quelques recherches sur l'élimination du mercure par les urines. Carle and Boulud (Lyons).
40 Cas de larva migrans. E. Langlet and P. Delaunay.
41 Sur le chancre syphilitique du col de l'uterus, et en particulier sur une forme ulcéreuse; sa confusion possible avec l'epithélioma utérin. G. Thiblerge.
42 Etat constitutionnel des rhumatisants blennorrhagiques. A. Renault.
43 *Signe de diagnostic des epithéliomas des regions pileuses. Audry. From society report.
44 (No. 3.) *Sur une nouvelle forme de dermatose papulo-exsudative provoquée par la pilocarpine. H. Hallopeau and Vieillard.
45 Conception générale des dermatoses. L. Brocq. (Continued.)

31. Pigmented Syphilids on the Neck.—Hulleu concludes from a study of 23 subjects out of a much larger experience that roseola occurs on the neck much more frequently than is generally supposed, but it is usually so fleeting that it escapes observation unless special watch is kept for it. The spot occupied by the roseola is the site of the syphilid later. The pigmented ring around it is probably the result of the disturbances in the circulation immediately surrounding the cicatricial relics of the roseola.

32. Surgery of Hypertrophic Acne of Nose.—Dubreuilh now operates on a nose showing signs of hypertrophic acne, without waiting for the organ to assume great size. He relates the particulars of 6 pronounced cases, the illustrations showing the entire relief of the deformity. He makes an incision on the median line and then dissects out the tumors on each side, the finger in the nostril as a guide. There is very little hemorrhage. He prefers to cut off slices after the first large mass has been removed, applying thermocautery at once to each raw surface, and thus carving out a good shaped nose, leaving always the inner wall .5 cm. in thickness at least, a little thicker at the nostrils and a little thinner at the tip of the nose. A groove should also be made with the thermocautery to define the ala nasi, where cicatricial retraction is liable to be excessive. As asepsis is out of the question, he dresses the raw surfaces with boricated dressings; the eschar drops off in six or seven days, at which time there is liable to be a little secondary hemorrhage, always easily controlled. By the end of the second week most of the wound has healed, that is, wherever sebaceous glands existed; those parts alone where the surface was purely fibrous take longer to heal. This is the time to apply the Thiersch flaps. He takes them from the arm and covers the surface well with them. The flaps must not be too thin. The results of this decortication and transplantation have been definite in all his cases. No recurrence has ever been reported, and in one of the cases described the acne on the cheeks subsided spontaneously after the healing of the nose. Even superficial decortication seems to arrest the progress of the affection, which suggests that the subepidermic layer is the seat of the trouble, and also that any deformity of this kind may be arrested in its early stages.

33. Treatment of Leprosy.—Brault advocates mercurial treatment of lepers for the reason that marked improvement has followed its use in many cases; it is also convenient, as the personnel of the dermatologic clinics are trained in mercurial treatment, and also because it places the lepers on the same plane as the other frequenters of the clinic and leaves them a ray of hope, the physician thus dissimulating his conviction of the powerlessness of medical aid in this inevitably fatal disease. Let us relieve and console, Brault continues, since we can not cure. Hygiene and local treatment, with minor surgical interventions as needed, will relieve and prolong life in these cases. In his experience numberless remedies and local applications were tried, none more than transiently beneficial.

35. Pyemic Cutaneous Affections.—Lebet draws the clinical and histological picture of the pyo-septicemic dermatoses caused by microbes brought to the skin by the blood. He calls them pyemic or metastatic dermatoses and points out the points of resemblance between those caused by streptococci and staphylococci and the syphilitic and typhoid roseola, the macula of lepra, etc. These pyemic skin affections may be purpuric, pustulous, varioliform or nodular in character. There is no reason for classing them as angioneuroses; they are not erythemata, but inflammations.

43. Diagnostic Sign of Epithelioma in Hairy Regions.—Audry calls attention to the persistence of apparently normal hairs in a chronic ulcerated patch, as a sign of epithelioma. Solidly implanted hairs in or between the masses of the growth occur only in this kind of a chronic ulceration.

44. New Form of Dermatosis Induced by Pilocarpin.—A man of 52, previously healthy, consulted a distinguished ophthalmologist last December on account of an ocular affection diagnosed as episcleritis with exaggerated tension, an attack of

V 42
1904

subacute glaucoma. He was treated by instillations of a .5 per cent. solution of pilocarpin and hypodermic injections of the same, at first .5 cg. and then 1 cg., with 3 gm. of sodium salicylate daily. After fifteen days of this treatment vision had improved and the dose of pilocarpin was reduced to .5 cg., but twelve days later exacerbation of the eye troubles having been noticed, the dose was increased again to 1 cg. On suspension of this treatment after it had been continued for thirty-five days, a peculiar dermatosis developed with symptoms indicating intoxication, the disturbances affecting the nervous system, brain, circulation and miction, with death the sixty-third day after commencing treatment. The papulo-exudative dermatosis was localized in the sweat glands, affecting mostly the face and members. The exudate was at first limpid, but soon became purulent. The papules in the plantar region persisted without opening. The clinical characteristics of this dermatosis differ from every other known to date. The severe disturbances in the brain and heart innervation are especially striking features, as also the absence of fever, and the lack of any antidote for pilocarpin and of means to insure its elimination. Hallopeau formulates the law that every morbific agent exerts an action specific to itself on certain elements of the organism into which it is introduced, while, on the other hand, each of these elements opposes a specific resistance to it.

Presse Médicale, Paris.

46 (I, No. 24.) *L'hospitalisation des tuberculeux à Paris. Résultats generaux de l'enquête de la *Presse Médicale*. E. De Lavarenne.

47 Des variations du poids au cours de la scarlatine (variations in weight). M. Garnier and Sabaréanu.

48 Causeries électriques. Physiologie du courant électrique. Ses propriétés. A. Zimmern.

46. Tuberculous Inmates of Paris Hospitals.—The isolation of tuberculous subjects is the question of the day at Paris, as has been mentioned in our news columns of late. The *Presse Médicale* has been collecting the exact number at present sheltered in the hospitals and finds that in the 106 different medical and surgical "services" there were 8,836 patients under treatment on March 17, 1904. Of this total number 1,789 were tuberculous, including 1,172 men, 536 women and 81 children. The "closed" cases numbered 540, of whom 292 were men, 206 women and 52 children. The "open" dangerous cases numbered 1,249, of whom 880 were men, 330 women and 39 children. This is a proportion of about 22.5 per cent. of the total number of the hospitalized. The capacity of the Paris hospitals is estimated at 7,194, and their crowded condition is shown by the large number over this figure now sheltered in them. The city of Paris has appropriated $9,000,000 for the reconstruction of its hospital service, and is anxious to eliminate the chronic cases to make room for the acute cases and wounded for whom the city hospitals are primarily destined. Sweeping changes are contemplated.

Semaine Médicale, Paris.

49 (XXIV, No. 13.) *La coexistence de la fièvre typhoïde et de la scarlatine. F. Farnarier.

50 *Séparation de l'urine des deux reins au moyen du massage de rein (of kidney). D. Giordano and G. Nicolich. Abstract.

51 *Action élective de plusieurs parties du corps sur certains écrans phosphorescents. A. Charpentier (Nancy). From society report.

49. Coexistence of Scarlet Fever and Typhoid.—Farnarier analyzes a total of 75 cases of the coexistence of these two diseases that have been published since 1833. The list includes 39 absolutely beyond criticism, and on these his monograph is based. The typhoid infection is the preceding one in the vast majority of cases, but occasionally the onset of the two diseases is simultaneous and the scarlet fever masks the typhoid, until as convalescence from the former occurs, the signs of the latter are revealed. The prognosis of the combination does not seem to be more unfavorable than of typhoid fever alone. In the 39 cases the mortality was only 10 per cent. In the fatal cases death was induced by the hemorrhagic form of the scarlet fever in 2 instances, by uremia in another, and by perforation during a relapse of the typhoid in the fourth. He does not regard this low mortality as more than a mere coincidence—not establishing that the two diseases attenuate each other. In each of these fatal cases the typhoid had preceded the scarlet fever. Among the complications noted have been ear troubles in 2; albuminuria in one, and consecutive typhoid phlebitis in another, also albuminuria from the onset of the scarlet fever in one case, with an attack of acute nephritis as the typhoid fever declined. Marrotte's patient exhibited edema of face, hands and feet with oliguria, but no albuminuria. In 2 cases convalescence was disturbed by suppuration of cervical glands. Whenever a scarlet fever shows atypical features, especially during its decline, the possibility of an unrecognized typhoid should be borne in mind, and the prognosis be guarded until this question is settled. Inversely, when a scarlatiniform eruption occurs during typhoid fever it should not be ascribed as a matter of course to a toxic or infectious erythema, but the possibility of scarlet fever should not be forgotten. The consequences of overlooking such a possibility might entail very serious consequences both for the patient and his environment. Nineteen articles are reviewed, including one by Hektoen.

50. Segregation of Urine by Massage of the Kidneys.—Giordano and Nicolich have been applying massage of the kidney as a means of testing its functions. The former has the subject recline for a few hours and then squeezes one kidney with massage of the region and of the back and side of the abdomen. The urine is then withdrawn from the bladder and the other kidney is manipulated in the same way. If the urine obtained from each kidney differs in its composition, there is evidently some difference in the condition of the organs. Nicolich rinses and evacuates the bladder and then introduces a catheter. He then massages one kidney; if the organ is normal clear urine drips from the catheter, the drops coming more frequently the more energetic the massage. He then massages the other kidney in the same way. When it is pathologic the urine, clear at first, soon becomes turbid. He was able to locate the diseased kidney in 2 cases in which he applied this functional test, and the diagnosis was confirmed by the nephrectomy. When the patient voids turbid urine while clear urine is obtained under massage of both kidneys then the lesion can not be in the kidneys, but must be sought elsewhere, as he had occasion to establish in one instance.

51. Elective Action of N Rays.—Charpentier found that most of the alkaloids and poisons emit N rays, and also that the action of these substances on the phosphorescent screen was enhanced by the vicinity of another source for the N rays. The idea then occurred to him to construct a phosphorescent screen containing some of these substances in addition to the phosphorescent sulphid. These screens are acted on by the physiologic N rays, but in an elective manner. The organ which acts most energetically on a given screen is always that organ which has the strongest affinity for the alkaloid used in making the screen. For example, the digitalin screen is rendered most luminous when exposed to the N rays from the heart; the pilocarpin screen when exposed to the glands, atropin to the heart—whose action atropin accelerates—while the atropin screen becomes less luminous when exposed to the N rays from the glands. The strychnin screen is most luminous when exposed to the spinal cord, the apomorphin screen with the medulla, the nicotin screen with the protuberantia, the santonin screen with the visual centers, etc., etc. See editorial pages.

Berliner klinische Wochenschrift.

52 (XLI, No. 12.) *Improved Salves. O. Liebreich.—Ueber Petrol-Salbe.

53 *Zur Serum-Behandlung des Heu-Fiebers. A. Lubbert and C. Prausnitz. (Concluded.)

54 *Medicolegal Expert Testimony. W. A. Freund.—Meine Erfahrungen als Sachverständiger im Strafprocess und die darauf gegründeten Vorschläge zu Veränderungen der bisher geltenden Strafprocessordnung. (With discussion.)

55 (No. 13.) *Gonorroe im Wochenbett (during confinement). A. Martin.

56 Origin of Human Tuberculosis. J. Orth (Berlin).—Einige Zeit- und Streitfragen aus dem Gebiete der Tuberculose. (Commenced in No. 11.)

57 *Zur Diagnose des Magen Carcinoms (of stomach). J. Sigel. (Commenced in No. 12.)

58 Warning Circular Issued by German Society for Repression of Venereal Diseases. A. Blaschko (Berlin).—Das Merkblatt, etc.

59 *Treatment of Trypanosoma Affections with Stains. P. Ehrlich and K. Shiga.—Farbentherapeutische Versuche bei Trypanosomenerkrankungen.

52. **Fetron Salve.**—Liebreich describes a new salve which stands midway between the types of the absorbable and the protecting salves, that is, between lanolin on one hand and vaselin on the other. Lanolin is a fine salve when absorption is desired, but vaselin is far from being a perfect protection. For one reason, because it melts at such low temperatures. He has experimented with various substances and found that the anilid of stearic acid—Stearinsäureanilid—possesses the property of raising the melting point of vaselin when incorporated with it. Even a small proportion of the anilid—not more than 3 per cent.—raises the melting point to 65 or 70 C. (168 F.). The anilid is an uncommonly constant body, is not decomposed by aqueous alkaline solutions even when long boiled with them, and behaves in other respects like the cholesterin ester which occurs in lanolin. It has the further property that it takes up more fluids than lanolin, while it keeps indefinitely, uninfluenced by atmospheric influences. It gives up medicaments incorporated with it to the skin much better than vaselin. He has used this combination, which he calls "fetron salve," in 100 cases of various cutaneous affections and found that it realized all his theoretically founded anticipations. In one case an affection which had proved rebellious for a year to lanolin and vaselin salves rapidly healed under the fetron. There is never need for more than 3 to 5 per cent. of the anilid and this amount is too small for any toxic action from the anilin to be feared.

53. **Serum Treatment of Hay Fever.**—This communication issues from the Hamburg Institute of Hygiene in charge of Dunbar, and describes 32 cases in detail out of the extensive records of the institute to demonstrate the great value of the serum. Among them we note that two persons subject to hay fever went for a stroll with a physician on the meadows near Hamburg. The day was sunny and a little windy. One person—A—used the serum as a prophylactic, while the other —B—did not use it, and presented a typical attack of hay fever, sneezing and depressed, with other symptoms of typical hay fever for two days. He then used the serum, while A discarded it, and the same stroll was repeated two or three days later, but with rôles reversed—B using the serum and A not. B's protection was complete as also that of other protected persons accompanying them, while A, not protected, suffered a typical attack of hay fever. Dunbar and his assistants are convinced that success is certain unless some peculiarity in the constitution forbids the serum from exerting its specific action. [We recall the fact previously mentioned here that Professor Dunbar is an American, a native of St. Paul.—ED.]

54. **Medicolegal Expert Experiences.**—Freund reviews his experiences in forensic medicine and suggests certain pressing needs for reform. He insists that the capacity for observation of the witnesses should be tested by psychologic experiments before such blind credence is placed on their testimony, as is customary at present with judges and juries. His experience includes the recent sensational case in which a countess was accused of simulating a pregnancy and childbirth in order to secure an inheritance. He urges the expert to refrain from conjecture and to state merely the scientifically demonstrated facts. He also mentions several points for guidance to avoid conflict between the testimony of experts.

55. **Gonorrhea During Childbed.**—Martin has observed 13 cases in which the childbed was complicated with chronic gonorrhea. Spontaneous recovery was the rule, and this suggests caution against too early operating in case of extensive disturbances in the uterus and annexes when due to the gonococcus. When the fever is high, with hyperleucocytosis, simple evacuation of the pus through the vagina with drainage seems to be the most promising treatment. Under other circumstances he found general treatment sufficient supplemented by local irrigation with saline, with or without thymol or lysol. Sterile yeast seemed to be the most effectual local treatment in his experience.

57. **Differential Diagnosis of Cancer of Stomach.**—Sigel reports from Ewald's hospital service at Berlin a large number of cases in which four newer diagnostic measures were carefully tested: 1, the tryptophan reaction; 2, Salomon's determination of albumin; 3, Gluzinski's test, and 4, examination of the fatty acids in the urine. None of these tests represents a great advance in diagnosticating, and the last mentioned was found to have no value for the diagnosis. The tryptophan reaction was observed in only 2 out of 15 cases of cancer of the stomach and once in 20 cases of ulcer. Salomon's albumin test was described in THE JOURNAL, xli, page 693. It is based on the finding that every cancer exudes more or less serum containing albumin. The subject is allowed only fluid food and after 2 p. m. nothing containing albumin. The stomach is carefully rinsed in the evening, and again the next morning the stomach is rinsed out with 400 c.c. of physiologic saline, the fluid being allowed to run out and then be poured in again until the stomach walls are thoroughly rinsed. The amount of albumin in the rinsing fluid is then determined with the Esbach test, and of nitrogen with the Kjeldahl. Salomon always found in case of cancer a proportion of 20 mg. nitrogen and considerable albumin precipitation. Sigel's experience was corroborative as albumin was always present from traces up to ¾ per 1,000 and nitrogen from 7 to 63 mg., but the findings were also positive in a few cases of simple ulcer. He tabulates the results in 20 cases of gastric affections in which this test was applied. He does not agree with Salomon that negative results exclude ulceration of any kind in the stomach, as the serum exuding from a benign ulcer might be peptonized and pass onward from the stomach at once. Pronounced albumin reaction would certainly differentiate a carcinoma on the lesser curvature from chronic gastritis, as although albumin might be secreted in the latter affection it is a much less frequent occurrence. In 2 of the cancer cases there were only traces of albumin while the nitrogen value was very high. Gastroenterostomy had been done in each of these cases, and thus the irritating effect of the food particles had been eliminated. Salomon also noticed this discrepancy in a few instances. He was inclined to ascribe it to peptonization of the secreted albumin either by the digestive processes or by the action of bacteria. Sigel further remarks that the exudation of an albuminous fluid is not an early sign of carcinoma. The Gluzinski method was applied in 18 cases. This test is based on the fact that a chronic mucous gastritis develops on the basis of an acid gastric catarrh as also during the transition of an ulcer into a cancer or the healing of the ulcer. The transformation of the acid into a mucous catarrh thus affords a sign which may be utilized for an early diagnosis of cancer. The stomach is tested three times on the same day, rinsing it out fasting, then forty-five minutes after a test breakfast, and again four hours after a beefsteak test dinner. When there is no or very slight free HCl reaction at one of these tests, while the reaction is pronounced after the others, and if the Jaworski-Boas-Kaufmann bacteria are present (although this is not indispensable), these are signs that the acid catarrh is beginning to change into a mucous affection. With an uncomplicated ulcer in the pyloric region there is invariably free HCl after each one of these tests. The diagnosis of carcinoma pylori is certain, Gluzinski thinks, when secretory insufficiency accompanies an incipient stenosis of the pylorus with manifestations of a developing mucous catarrh. Sigel describes the technic and its results in 18 cases, concluding that it is a very valuable diagnostic measure in some cases in which other methods have failed, but it is unreliable in others, and it is sometimes difficult to persuade the patient to the threefold repetition of the stomach siphonage.

59. **Treatment of Trypanosoma Affections.**—Ehrlich and Shiga report experiments with various stains in the endeavor to discover some substance which would destroy the trypanosomata as effectually as quinin destroys the malaria germ. The higher organized protozoa are exceptionally susceptible and they found in effect that a certain stain—which they call trypan red—was able to destroy the trypanosomata in mice and protect them against relapses. An important feature of their research is the discovery that the stain was equally effective when administered by way of the stomach. The stain in question belongs to the benzo-purpurin series, and is made by the combination of one molecule of tetrazotized benzidin-

monosulfo acid and two molecules of sodium naphthylamindisulphonate. It is very slightly toxic, requiring .5 gm. per kilo to kill a mouse. As much as .5 c.c. of a 1 per cent. solution can be injected in a mouse with impunity. The skin becomes red, perceptible in eight minutes and reaching its maximum in eight to twelve hours, the tint persisting for six to ten weeks and longer than this in the internal organs.

Centralblatt f. Chirurgie, Leipsic.

60 (XXXI, No. 12.) Negative Results of Attempts to Induce Gastric Ulcer in Animals by Injury of Gastric Nerves. M. Donati (Turin).—Experimentelle Versuche, das Magengeschwür vermittels Verletzungen der Magennerven hervorzurufen.

61 Recovery in Case of Chronic Glanders in Man. K. Zieler (Breslau).—Ein geheilter Fall von chronischem Rotz beim Menschen mit sehr seltener Lokalisation (Pachymeningitis externa malleosa circumscripta).

62 (No. 13.) *Flap Incision for Operative Reposition of Old Dislocations of Hip Joint. L. Rydygier (Lemberg).—Der Lappenschnitt zur blutigen Reposition veralteter Hüftgelenksverrenkungen.

63 *Zur Technik der Anwendung venöser Hyperämie. Henle (Breslau).

64 *Sterilisation of Catgut. M. Claudius.—Berichtigung.

65 (No. 14.) *Ein neues Verfahren zur operativen Therapie der chronischen Nephritis. J. Bakes (Trebitsch).

66 *Zur Asepsis der Hände während der Operation. L. Rydygier.

67 *Zur intravenösen Infusion. A. Schädelin (Pyrmont).

68 *Exclusion of Atmospheric Pressure, etc., for Operations on Thorax. F. Sauerbruch.—Bemerkungen zum Artikel der Herren Prof. Brauer und Prof. Petersen (Heidelberg): "Ueber eine wesentliche Vereinfachung der künstlichen Atmung nach Sauerbruch." Reply to same. Brauer and Petersen.

62. Flap Incision for Old Dislocation of Hip Joint.—Rydygier illustrates his technic and urgently recommends it in old established cases of dislocation. The essential feature of the semicircular incision is that it allows the great trochanter to be chiseled off as obliquely as possible, thus leaving a surface of chiseled bone fully 6 cm. or more in length. This allows even much shortened muscles to be brought into contact with some part of this bone surface, thus insuring a firm attachment to the bone and final functional capacity of the muscles. The rear end of the nearly semi-circular incision extends parallel with the fibers of the gluteus maximus, possibly 12 to 18 cm. in length. The other end extends upward between the tensor fascie and the gluteus medius toward the anterior superior spinous process of the ilium. The center of the incision is about 6 to 7 cm. below the apex of the trochanter.

63. Technic of Therapeutic Venous Hyperemia.—Henle deplores that so few physicians are making systematic use of Bier's method of passive congestion or venous hyperemia, notwithstanding its many advantages and successes. Those who have once tried it are extending its use more and more, especially when they have beheld the immediate relief of the pain in a case of gonorrheal arthritis, for instance. Henle waits a couple of days after fractures and sprains and then applies the passive congestion, finding it so successful in abolishing all further pain that there is no need for narcotics. Bier's communications on the subject have frequently been mentioned in THE JOURNAL, as, for instance, xli, page 68. He has found that besides its pain-relieving qualities, passive congestion kills or attenuates bacteria, promotes absorption and has also a dissolving and nourishing effect. Henle regards it as a most valuable adjuvant to other measures, but not destined to supplant them. He has improved on Bier's simple constricting band and gives an illustration of the absolutely safe, adjustable contrivance which he now prefers to use. The aim is to induce warm, not cold, congestion—the latter does harm. He uses a long, narrow rubber bag, similar to that used with the Riva-Rocci sphygmomanometer, fastened to a strip of stout cloth. It is placed very loosely on the arm, the ends held flat together with a clamp. A rubber tube emerges from the bag near the center and a corresponding tube is connected with a mercury manometer, both tubes being attached to a T piece, the lower end of which is connected by a third tube with an ordinary double inflating bulb. When the tubular bag around the arm is inflated the exact amount of pressure is recorded by the manometer. The pressure can thus be accurately dosed and when the individual dosage is once determined it can be obtained again at any future time as desired. The optimum is a pressure between 60 and 100 mm. mercury. Once established for the individual, it can be reapplied again at any time without the necessity for the tentative applications necessary when there is no means of determining the exact pressure required. The bag may be left in place and merely the connecting tube removed between the applications, thus causing still less disturbance. The technic described may prove an improvement over the ordinary Esmarch bandage when it is desired to expel the blood from the part, or it may serve for "hot congestion," that is, shutting off all circulation from the part for a few minutes and then removing the constriction entirely, to flood the part with fresh arterial blood. The bag, manometer and double bulb are inexpensive.

64. Claudius' Iodized Catgut.—Claudius corrects a statement in Salkindsohn's article. The solution he uses for the sterilization of catgut is 1 part iodin, 1 part potassium iodid and 100 parts water. (See THE JOURNAL, page 622.)

65. New Proposal for Operative Treatment of Chronic Nephritis.—Bakes thinks that the aim sought by Edebohls, in his method of decapsulation of the kidney—that is, the establishment of new conditions of circulation for the organ—would be better realized by wrapping the decapsulated organ in the omentum or by pushing the decapsulated kidney down between the roots of the mesentery after energetic friction of the serous surfaces. The choice of these methods would depend on the size of the kidney and the condition of the omentum. In case of a shriveled, atrophic omentum the second procedure would be preferable. He applied the first method in a clinical case last February. The patient bore the operation well and the decorticated kidney was easily enveloped in the omentum drawn up for the purpose. He proceeds as by Edebohls' technic, and removes the capsule; then slits the peritoneum parallel to the upper edge of the cecum and ascending colon and fastens the lower lip of the wound in the peritoneum to the hylus of the kidney with very fine sutures through the parenchyma of the kidney its entire length. The omentum is then drawn up through the slit in the peritoneum and wrapped around the entire kidney. The peripheral parts of the omentum are fastened partly to the kidney and partly to neighboring tissues to prevent its slipping back. The upper lip of the wound in the peritoneum is then sutured to the serosa of the omentum and the wound sutured in tiers. He thinks that this insures far better conditions for the circulation thereafter than the Edebohls' technic. [In the *Gazzetta degli Ospedali* of April 3 Maragliano deplores the inertia of Italian surgeons who have only just begun to realize the importance of Edebohls' operative treatment of chronic nephritis, which, he thinks, has now passed beyond the stage of experiment and is an established advance. He refers in connection with it to an article by M. Kreps, published in the *St. Petersburger med. Wochft.* of January 9. Kreps describes some instructive cases to illustrate the importance of reflex action from one kidney on the other. When a stone in the ureter is suspected it should be pushed back into the pelvis of the kidney, he advises, after preliminary injection of hot oil or glycerin. In case no stone is found in the suspected ureter it should be sought in the other ureter, and may be found there, although all the symptoms had been referred to its mate. If the stone has been found in the first ureter and been pushed back into the pelvis and still the anuria persists, the second ureter should be catheterized at once, as there is always a possibility of bilateral calculous obstruction, and there may be some old stricture in the second ureter which had never induced anuria, but remained latent until there was trouble in its mate. He also urges the necessity for treatment of a stricture of the ureter as soon as discovered, citing a fatal case in which a stone had become impacted at a stricture of which the physician had been long cognizant, but had neglected systematic dilatation. Maragliano in conclusion remarks that Baccelli's method of influencing the circulation in the kidney by withdrawing blood from the foot on the same side has thoroughly established its efficacy and harmlessness. Remarkable instances of its prompt action in curing acute nephritis in its early stages have been published, among them that of the lad of 7 who recovered with amazing rapidity after a single venesection and withdrawal

of 100 c.c. during the tempestuous onset of an acute nephritis. Baccelli repeats the venesection if necessary.—ED.]

66. **Asepsis of Hands During Operations.**—Rydygier believes in repeated rinsing of the hands in saline solution during operations, and thinks that if both operator and assistants acquire this habit of frequently repeated mechanical cleansing of the hands gloves will not be needed.

67. **Intravenous Infusion. Technic and Resuscitation of Babe.**—Schlicking gives a picture of an apparatus which has done him good service for twenty-seven years in intravenous infusion. A tube with faucet projects tapering to a point inside a glass receptacle with an outlet below. As the fluid enters through the tube above all air bubbles escape and rise to the top of the receptacle while the fluid passes on and out below. He adds parenthetically that he has succeeded in reviving still another newborn babe in almost hopeless asphyxia by infusing into the umbilical vein 30 gm. of a 1 per cent. solution of sodium saccharate to which 6 drops of a 1/10 alcoholic solution of camphor had been added. He was unsuccessful in another case, probably because he waited too long before resorting to this simple measure. See his previous article in THE JOURNAL, xxxix, page 454.

68. **Elimination of Pneumothorax in Intrathoracal Operations by the Pneumatic Chamber.**—Under this heading THE JOURNAL, page 930, described the air chamber devised by Sauerbruch, "scientific assistant" at Mikulicz' clinic, to exclude the pressure of the atmosphere and thus enable surgical intervention inside the thorax without dread of the collapse of the lungs. When the atmospheric pressure is eliminated the lung action continues practically unmodified whether the thorax is opened or not. He stated that his communication was only a preliminary note, but it was soon followed by an article from Brauer and Petersen, who announced an "essential simplification of the Sauerbruch method." Sauerbruch here claims priority for this "simplification" and shows that the idea had occurred to him and had been applied in the clinic before the Heidelberg professors had thought of it. It is a reversal of the air chamber technic. Instead of placing the patient or animal in the air chamber with his head outside and eliminating the atmospheric pressure inside the chamber, the head is placed in the air chamber, the body outside, and the atmospheric pressure inside the air chamber is artificially raised to an over-pressure of 10 mm. mercury. This insures the maintenance of the physiologic difference between the pressure within and without the lungs, and the lung action continues unmodified when the thorax is opened. The animals in his experiences continued to breathe naturally notwithstanding that both lungs were freely exposed to the air. The objection to this technic was found to be that the person administering the anesthetic inside the air chamber was subjected to such inconvenience that this mode of avoiding pneumothorax was temporarily abandoned until a larger air chamber could be procured. The new one now building is made to use with either a minus or plus atmospheric pressure. The Heidelberg clinicians propose to use instead of the air pump an oxygen tank to induce the over-pressure. These communications are given a separate supplement in the *Centralblatt* with leaded type. Sauerbruch adds in conclusion that he is convinced that by the elimination of atmospheric pressure all kinds of operations on the brain, eye, heart, spine and diaphragm may be facilitated. In his work on the lungs he aims to supply the difference of atmospheric pressure as if the air chamber were merely an enlargement of the natural pleura. The Brauer and Petersen article was published in the *Zeitschrift f. phys. Chemie*, xli, No. 4. [Mikulicz contributes an article on this subject to the *Deutsche med. Wochft.* of April 7, recapitulating the above points. He urges the general adoption of the word thoracotomy as an equivalent for laparotomy, as the air chamber allows ample access to the thorax, which thus becomes as accessible as the abdomen. The operator must, however, be careful to make the closure of the wound opening into the thorax absolutely air tight, as otherwise pneumothorax is liable to develop later. On this account he advises to make the opening in an interspace without resecting the ribs. The incision must be exactly in the center of the interspace to allow perfect suturing afterward. The ribs can then usually be pushed apart sufficiently to allow ample access. If not, one can be broken with the hands, inside its periosteum, which obviates the necessity for suturing it later. He uses a retractor to hold the ribs out of the way similar to an ordinary lid holder. The third to the seventh interspaces are best adapted for this intervention. The protruding lung is held back in the same way as the intestines during a laparotomy. The intercostal musculature is then carefully sutured, if necessary throwing the catgut around the rib for a better hold. The muscles above are then sutured in tiers with catgut and the skin with silk. Resection of the ribs may be unavoidable in some cases. His article is not concluded.—ED.]

Centralblatt f. Gynäkologie, Leipsic.

69 (XXVIII, No. 12.) *Position of Arms During Narcosis. H. Rothe (Breslau).—Die Lagerung der Arme in der Narkose.
70 *Successful Prophylaxis of Postoperative Cystitis. K. Baisch (Döderlein's clinic, Tübingen).—Erfolge in der prophylaktischen Bekämpfung der postoperativen Cystitis.
71 *Removal of Ureter Calculus by Way of Vagina. R. Gradenwitz (Breslau).—Entfernung eines Ureterssteines auf vaginalem Wege.

69. **Position of Arms During Narcosis.**—Rothe is convinced that postoperative paralysis of the arm is a more frequent occurrence than is generally recognized, as also slighter paretic conditions, etc. The brachial plexus is compressed between the clavicle and the first rib when the arms are raised, and he seeks to avoid this by fastening the arms parallel and close to the trunk. He uses a couple of arm bands for each arm, one for the forearm and the other for the upper portion. The corresponding bands are fastened together under the table. It is impossible to keep watch of the pulse with the arms thus bound down, but this, he thinks, is immaterial, presenting arguments in favor of this view and citing the English anesthetists who have long since discarded the control of the pulse as superfluous. He quotes Czempin's work on chloroform narcosis as the standard authority on this subject.

70. **Avoidance of Postoperative Cystitis.**—Baisch made the discovery that the death of a certain patient fourteen months after ablation of a uterine cancer—the general health being good during the interval—was due to a progressive postoperative cystitis. He believes that it is more than probable that many deaths which have been attributed to recurrence of the cancer or to an intercurrent affection, were in reality due to an unsuspected postoperative cystitis or its sequels. There has not been a single instance of postoperative cystitis in the 31 cases operated on by the Wertheim technic since he instituted systematic rinsing out of the bladder every time the catheter is used. Only one of the 31 was able to urinate spontaneously from the first, and 5 died in the course of the week with no manifestations of cystitis. Of the remaining 25 one had suffered from severe nephritis before the intervention and it proved impossible to avert the cystitis in her case. In 2 the last drops of urine were a trifle cloudy and the colon bacillus was found, but vanished in a few days with no further signs of trouble. The others—some of whom required catheterization for eighteen days before spontaneous urination was restored—all escaped any bladder trouble. Even after spontaneous urination is restored it is at first imperfect and the bladder is not completely emptied, thus favoring infection. Hence it follows that these irrigations must be faithfully kept up until the bladder function is completely restored to normal and the last drops of urine are spontaneously evacuated. Wertheim himself now injects a solution of protargol or boric acid as a prophylactic measure. By this means all the germs introduced by the catheter are killed at once before they have time or opportunity to do any damage.

71. **Removal of Stone in Ureter by Way of Vagina.**—General narcosis was not considered necessary. The bulging portion of the ureter was reached through an incision in the anterior wall of the vagina and pushed down and out through another incision just above. The lower portion of the parametrium had been previously incised between two ligatures. The ureter was incised and after a calculus the size of a cherry-stone had been removed the ureter was sutured with the finest thread, over the sound at first, the other tissues with catgut. The

V 42
1904

operation lasted an hour, but the patient did not moan once. Convalescence was smooth, without fever, and in three weeks the patient was dismissed as cured of the present trouble. The cystoscope showed both ureters functioning normally. The two scars in the vagina could scarcely be felt, the urine was limpid, there was no trace of a fistula and there had been no change in these conditions when the patient was last seen four months later. She was a woman of 43 with organic heart disease, a v-para.

Gazzetta degli Ospedali, Milan.

Last indexed page 932.

72 (XXV, No. 28.) Reazione glicogenica dei globuli bianchi (of leucocytes). C. Tarchetti.
73 Caso di lombricosi epatica. F. Schupfer (Rome).
74 L'infantilismo. A. Bruno.
75 A proposito delle sostanze grasse. S. Corsaio.
76 Severe Intoxication from Viper Bite Cured by Intravenous Injection of 1 Per Cent. Potassium Permanganate. A. Mori.—Caso grave di avvelenamento da vipera curato col permanganato potassico.
77 Sulla tuberculosi primitiva dell' ovaio. G. Sonni.
78 (No. 31.) Durata del tempo di tensione in individui cardiopatici. E. Belliboni and F. Soprana.
79 Typhus-Diagnostikum Ficker. L. Datta.
80 Dispepsie gastriche nei malarici. A. De Blasi.
81 Caso di mastite della mensenna con esito in suppurazione. N. Maglia.
82 New Operating Table. C. Dalla Rosa (Treviglio).
83 (No. 34.) Sublimate in Experimental Anthrax. D. Calamida.—Sull'azione del sublimato nelle infezioni sperimentali da carbonchio negli animali refrattori.
84 *Sulla terapia della peritonite tubercolare. L. Misserocchi.
85 Ricerche batteriologiche in 2 casi di tifoitfo ad inizio brusco e sfebbramento rapido. C. Quadrone.
86 Causlstica dell' emiplegia linguale. F. Corsini.
87 (No. 37.) Epidemia famigliare di polmonite (of pneumonia). C. Tarchetti.
88 Sulla emostasi epatica. G. B. Segale.
89 La stenosi uretrale traumatica nella legge degli infortuni sul lavoro (in industrial accident insurance). C. Momo.
90 Raro caso di proiettile on el ventricolo sinistro del cuore (bullet in left ventricle). Bochi and Corsini (Grosseto).

84. Medical Treatment of Tubercular Peritonitis.—Misserocchi reports 14 cases of tubercular peritonitis cured by medical means alone. His experience has been still larger than this, but he mentions only those cases in which the interval since has been long enough to speak of a permanent cure. Measles or pertussis had preceded the tuberculosis in more than 78 per cent. of the cases. This confirms Rauder's figures. He found measles or pertussis, or both, in the antecedents of 83 per cent. of 352 tuberculous children. Misserocchi emphasizes this fact as of preponderant importance for the prophylaxis of tuberculosis. In 8 of his 14 cases there was ascites; in 4 a mixed, fibrous-ascitic-caseous form, and in 2 the fibrocaseous form. Treatment was by the use of iodin internally and externally. The children were put to bed and given a milk diet at first, with disinfection of the digestive tract, plenty of fresh air and gradually increasing nourishment to forced feeding. The children were cured as a matter of course even when merely out-patients, both in cases in which the peritonitis was the only manifestation of the disease and also in those in which the pleura or lungs were probably affected. Iodo-tannic syrup was given internally with an iodo-iodid salve rubbed into the abdomen. The ascites was absorbed and the palpated nodules retrogressed. The communication issues from Cattaneo's clinic at Parma.

Riforma Medica, Palermo.

Last indexed page 888.

91 (XX, No. 6.) Sull'esistenza in natura di virus rabico rinforzato. L. d'Amato (Naples).
92 Della gastroenterocotomia alla Roux. N. Giannattasio.
93 *Il triangolo paravertebrale di Grocco. G. Raduel. Abstract.
94 (No. 7.) Sull' origine della cirtasi. G. Lucibelli (De Renzi's clinic, Naples).
95 La pleurite linfomatosa. A. Signorelli (Baccelli's clinic, Rome). (Commenced in No. 6.)
96 Sulla natura ed azione della tossine difterica. G. Castronuovo.
97 Associazione del bacillo pseudo-difterico col gonococco di Neisser. L. Maccone (Turin).
98 Contributo allo studio dell'idrocefalia. T. Montagnini.
99 *Silver Fluorid in Erysipelas, Smallpox and Puerperal Infection. F. Jaja and F. De Marchis.—Il tachiolo nella cura del vaiuolo, etc. Abstract.
100 Nuevo metodo operativo per l'asportazione del laringe. F. Durante (Rome). Abstract.
101 *Terapia degli aneurismi dell'aorta. C. Forlanini. Abstract.
102 (No. 8.) *Le meningiti latenti nel pneumonici. G. Curlo (Maragliano's clinic, Genoa).
103 *Le infezioni miste nella difterite e loro cura. G. Castronuovo.
104 *Sull' uso del drenaggio retrogrado nelle ferite attraversanti il cervello (retrograde drainage of wounds traversing the brain). T. Cavazzani (Parma).
105 *Sulla patogenesi della nevrastenia e suoi rapporti colla neuroftosi. G. Ruggi (Modena). Abstract.

93. Grocco's Paravertebral Triangle.—When one side of the thorax is filled with a pleuritic effusion the contents are pushed over on the opposite side. There is an area of dullness over the rear of the thorax in these conditions coinciding with the center of the spine at the top, spreading out a little toward the bottom on the side of the effusion, and forming almost a square on the other side, although the general outline of the whole is rather triangular. The conditions in health and with artificially induced effusions of varying amounts are given in 7 diagrams. The pleural sac presses evenly against the spine, which explains the dullness over it. The effusion sometimes collects more at the back and sometimes extends more evenly all around the wall of the thorax. When the latter occurs there is liable to be a retrosternal area of dullness, which Banti has described as also a sign of pleuritic effusion.

99. Silver Fluorid as an Antiseptic.—A large number of Italian clinicians have been using silver fluorid with great success in the treatment of erysipelas, smallpox and puerperal infection. Some proclaim that it is the most powerful antiseptic at our disposal in comparison with its harmlessness for the tissues. Its action is purely local. Jaja has recently reported a severe case of confluent smallpox treated with a 1/10,000 solution of this drug with complete recovery in twenty-two days. He applies it as a spray under pressure, which is a peculiarly convenient form in smallpox, anthrax, etc., and allows the drug to penetrate into the deepest crevices. The vesicles were all aborted and none passed beyond the serous stage. The disease otherwise continued its regular course, unmodified by the applications. The spray was applied four times a day for fifteen days. The abortion of the vesicles in this case has convinced Jaja that the suppuration of the pustules is not an integral part of smallpox, but is due to secondary infection, an avoidable complication from the presence of pus cocci which are readily destroyed by the fluorid. In erysipelas the fluorid cured both the local and the general symptoms. De Marchis reports 16 cases of puerperal infection treated by daily intra-uterine irrigation with a 1/4,000 solution of the fluorid, using as much as three quarts of the solution, until it came away clear. Three to six irrigations generally succeeded in banishing the fever, but in one case eight were required and in another eleven. The sole inconvenience is that the solution spots the linen, but this is trifling in comparison with its many advantages. Mirto of Pavia also commends it as the most valuable of all disinfectants for the uterus and vagina.

101. Gelatin in Aneurisms of the Aorta.—Forlanini relates experiences with the therapeutic use of gelatin which establish that it has a marked influence on the arterial pressure, reducing it considerably when it is pathologically high. In a case of aneurism consecutive to smallpox he obtained prompt benefit from administration of gelatin either by the mouth or subcutaneously. The arterial pressure was materially reduced. This effect was never apparent when the arterial pressure was only slightly above normal.

102. Latent Meningitis in Pneumonia.—Curlo describes 2 cases of pneumonia in which the delirium and other symptoms observed were explained by unsuspected lesions of meningitis found at the necropsy. Out of a total of 1,350 pneumonia patients, in 20 these lesions were found in the meninges postmortem. This is a proportion of 1.9 per cent., while others have published percentages of .08 to 2 per cent. The prognosis of these cases should be guarded. The sole manifestation is usually the delirium with possibly convulsive attacks indicating trouble in the lower portion of the rolandic region. Two cases are described in detail.

103. Serum Treatment of Mixed Infection.—Castronuovo reviews nearly a dozen series of tests of antistreptococcus and antidiphtheria serum administered simultaneously to rabbits. The effects were not striking, but when anti-pneumococcus serum was given with the antidiphtheria serum, in cases of mixed infection from these germs, the results were highly successful.

104. **Retrograde Drainage of Brain Wounds.**—Cavazzani's patient was a young man who had been shot through the head, the bullet entering the right cheek and emerging in the left temple, severing the left optic nerve. The entire track left by the bullet was drained with a strip of iodoform gauze passed entirely through it and renewed every two or three days, for fifteen days. The gauze was then gradually withdrawn, a little at a time, allowing the wound to heal behind it. The fundus of the eye showed no lesions, but there was acute delirium during the first few days and at night for a time afterward. As the wound healed memory returned, particularly for past events, while for recent ones it was still defective. These disturbances, however, soon subsided and the psychic balance seemed completely restored, testifying to the fact that the functional lesion of the frontal lobe from the bullet had been merely a kind of paralysis from the trauma or shock, and not due to destruction of tissue. A year later the only visible traces of the accident were a slight interference with the movements of the jaw, and a slight depression in the temple; the muscular apparatus of the left eye was apparently intact, but mild epilepsy developed eight months after the accident, about one seizure a month, each preceded by a sensory acoustic aura which the patient described as a diabolic confusion of sounds and rumblings, followed by loss of consciousness and a day or so of prostration. There was no initial cry, no convulsion and no tongue symptom. At other times the hearing was normal. The memory was perfect except for the week or so preceding and following the accident. He had also lost the memory for many tunes which he had formerly been able to whistle. The mild character of the symptoms observed in this case was evidently due to the remarkable escape of the more important structures in this region as the bullet passed, but also in great measure to the prompt and effectual retrograde drainage, as Cavazzani calls it, passing completely through the head from one end of the bullet track to the other, but in the opposite direction to that followed by the bullet. By drawing the gauze through the passage it was cleared of clots and other débris while the iodoform insured antisepsis. The strip of gauze was wide enough to keep it in soft contact with the walls without compressing them. The effusion of serum into the gauze must have had a tendency to wash out into it all scraps of injured tissue which were thus easily removed as the gauze was drawn along. The case shows that the injured anterior end of the first left temporal convolution belongs to the zone of association, and that the impressions are arranged by allied groups on the cortex of this zone and are not diffuse and mixed as is probably the case in the anterior or frontal zone. In conclusion he relates the clinical history of a case of abscess in the right frontal lobe, consecutive to frontal sinusitis, with complete recovery after operative intervention. The symptoms had been slight mental disturbances, conjugated rotation of the head and eyes and jacksonian epilepsy in the domain of the facial nerve and left brachial plexus and in the adjacent regions, especially affecting some center of phonation. The mental disturbances were evidently a sign of paralysis from destruction, while the other symptoms indicated irritation or hyperfunction. Both cases are analyzed in detail, and the localization data compared.

105. **Neurasthenia in Relation to Nephroptosis.**—Ruggi admits the existence of an internal secretion in the kidneys. This secretion, in harmonious action with the other secretions, etc., of the organism, establishes what we call health, and any disproportion between these internal secretions causes sickness. When one of these secretions is lacking, as, for instance, after ovariectomy, the consequent disturbances may possibly be combated by organ therapy, not of the missing organ, but to reduce or stimulate the secretion of some other organ or organs which in these conditions are functioning out of proportion to the total output of internal secretions. When the kidneys are producing their internal secretion in deficient amount or in excess, as in case of a kidney irritated by displacement, the patient is liable to suffer in various ways which may be grouped as neurasthenia. The morbid condition may require treatment to increase the amount of the internal secretion of the displaced organ or to stimulate other organs to keep pace with its increased secretion. The partial ischemia, the ischemic neuralgias noted in case of nephroptosis, the oliguria or anuria observed in patients after nephropexy or during renal colics from calculi, may all be regarded as the effect of the deportation of renal material by way of the circulation—they are not merely the reflex phenomena they are usually considered. The sensory nerves in case of ptosis of the kidney are liable to be unduly stimulated, and this in turn entails psychic or nervous disturbances in the predisposed. He cites as an example of this condition the constant vague pain in the lumbar region noted in tardy neurasthenia after removal of the uterus and annexes. He suggests the practicability of treating neurasthenia consecutive to castration, by organ therapy addressed to the internal secretion of the kidney, which, under these circumstances, becomes either absolutely or relatively excessive.

Books Received.

PHYSIOLOGY AND PATHOLOGY OF THE URINE, with Methods for Its Examination. By J. Dixon Mann, M.D., F.R.C.P., Physician to the Salford Royal Hospital. With Illustrations. Cloth. Pp. 272. Price, $3.00. London: Charles Griffin & Co., Ltd. Philadelphia: J. B. Lippincott Co. 1904.

A TEXT-BOOK OF PHYSIOLOGY. By Isaac Ott, A.M., M.D., Professor of Physiology in the Medico-Chirurgical College of Philadelphia. With 137 Illustrations. Cloth. Pp. 563. Price, $3.00 net. Philadelphia: F. A. Davis Company.

THE THERAPEUTICS OF MINERAL SPRINGS AND CLIMATES. By I. Burney Yeo, M.D., F.R.C.P., Emeritus Professor of Medicine in King's College, London. Cloth. Pp. 760. Price, $3.50 net. Chicago: W. T. Keener & Co. 1904.

TWENTY-EIGHT ANNUAL REPORT OF THE NEW YORK STATE REFORMATORY AT ELMIRA. Illustrated Year Book. For the Fiscal Year Ending Sept. 30, 1903. Paper. Pp. 105. Reformatory: The Summary Press. 1904.

LE MALATTIE DEI PAESI CALDI LORO PROFILASSI ED IGIENE con un'appendice: *La vita nel Brasile*. By Dott. Carlo Musio. Un vol. di pag. xi-560 con 154 inc. e 11. L. 7.50. Milano: Ulrico Hoepli. 1904.

TRANSACTIONS OF THE THIRTY-FIRST ANNUAL SESSION OF THE MEDICAL SOCIETY OF VIRGINIA, Held in Roanoke, Va., Sept. 15-17, 1903. Cloth. cxx-362. Richmond, Va.: Williams Printing Co. 1904.

LA RACHITIDE E LE DEFORMITA DA ESSA PRODOTTE. By Dott. P. Mancini. Un vol. di pag. xxviii-800, con 116 inc. L. 4. Milano: Ulrico Hoepli. 1904.

BIENNIAL REPORT OF THE STATE BOARD OF HEALTH OF KENTUCKY, 1902-1903. Cloth. Pp. 286. Louisville, Ky.: Geo. G. Fetter Printing Co. 1904.

ELETTRICITA MEDICA. By A. D. Bocciardo. Un vol. di pag. xi-201. L. 2.50. Milano: Ulrico Hoepli, 1904.

NEW PATENTS.

Patents of interest to physicians, etc., March 22 to April 12:

755108. Pasteurizer. A. A. Busch, E. Gull and T. J. Barry.
756121. Electrical apparatus for therapeutic purposes. Frederick C. Fisher, Bristol, England.
755549. Dropping stopper. Karl Rettig, Spandau, Germany.
756005. Suspensory bandage. Edwin R. Drake, De Land, Fla.
756161. Atomizer. John F. Farmer, Portland, Ore.
756007. Cushion for douche pans. Harriet E. Felthousen, Jersey City, N. J.
756165. Uterine supporter. Jesse T. Hall, Chicago.
756122. Fastening device for truss pads. John E. Lee, Conshohocken, Pa.
755921. Surgical instrument for hemorrhoids. John W. O'Neill, Chicago.
755823. Spraying device. Russell B. Williamson, Clifton Springs, N. Y.
756457. Suppository-molding machine. Frank R. Bent, Hartford, Conn.
756213. Surgical knife. Smith A. Connell, Sr., East Las Vegas, N. M.
756354. Inhaler. Sydney O. Goldan, New York.
756252. Vaginal syringe. Wm. S. Locke, Cincinnati.
756544. Surgical or obstetric sheet. Wm. W. Townsend, Rutland, Vt.
756546. Combined hydrometer and syringe. Robert Van Benthuysen, Newark, N. J.
756441. Massage apparatus. Arthur Ward, Philadelphia.
756304. Sling. Frank L. Webster, Wailuku, Hawaii.
757013. Anesthetic vapor inhaler. George L. Bennett, Chicago.
757177. Pneumatic massage apparatus. Frederick H. Crabtree, Anaconda, Mont.
756941. Spark-gap for Roentgen-ray apparatus. John T. H. Dempster, Schenectady, N. Y.
757287. Artificial leg. Lee Duggan, Rocky Mount, N. C.
756858. Optical appliance. Johann Harraes, Chicago.
757041. Muscle developing finger band. Samuel Hosfeld, Philadelphia.
757200. Atomizer. Stephen Kettle, Chicago.
757419. Diluent for medical compounds. Joseph M. Schutz, Minneapolis.
757162. Suspensory bandage. Wm. A. Talnah, Portland, Me.
757157. Atomizer. Charles L. Turner, Winthrop, Mass.